



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](http://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 Rev 7**, titled "Steel Utility Set Exhaust and A Series Steel Supply Fans", sheets 1 through 22 of 22, dated 08/25/2008 and last revised on 06/28/21, prepared by Captive Aire Systems, Inc, signed and sealed by Wayne K. Helmila, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

### **MISSILE IMPACT RATING: Large and Small Missile Impact Resistant**

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, 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 revises **NOA #19-0717.09** 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*

**NOA No. 21-0318.10**  
**Expiration Date: March 4, 2024**  
**Approval Date: July 22, 2021**  
**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.

*Ishaq I. Chanda*

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**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 20-0318.10**  
**Expiration Date: March 4, 2024**  
**Approval Date: July 22, 2021**

**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 5<sup>th</sup> 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 6<sup>th</sup> edition (2017) FBC, dated 12/12/2017, issued by Rice Engineering, signed and sealed by Wayne K. Helmila, P.E.

*Ishaq I. Chanda*

---

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 21-0318.10**  
**Expiration Date: March 4, 2024**  
**Approval Date: July 22, 2021**

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

*Ishaq I. Chanda*

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**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 21-0318.10**  
**Expiration Date: March 4, 2024**  
**Approval Date: July 22, 2021**

**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.

*Ishaq I. Chanda*

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**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 21-0318.10**  
**Expiration Date: March 4, 2024**  
**Approval Date: July 22, 2021**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**5. New evidence submitted**

**B. DRAWINGS**

1. Drawing No. **NOA2 Rev 7**, titled “Steel Utility Set Exhaust and A Series Steel Supply Fans”, sheets 1 through 22 of 22, dated 08/25/2008 and last revised on 06/28/21, prepared by Captive Aire Systems, Inc, signed and sealed by Wayne K. Helmila, P.E.  
Note: This revision consists of FBC 2020 update and Hilti TZ2 anchor update.

**B. TESTS**

1. None.

**C. CALCULATIONS**

1. 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 **FBC 7<sup>th</sup> Edition (2020)**, dated March 10, 2021, issued by Rice Engineering, signed and sealed by Wayne K. Helmila, P.E.

**G. OTHER**

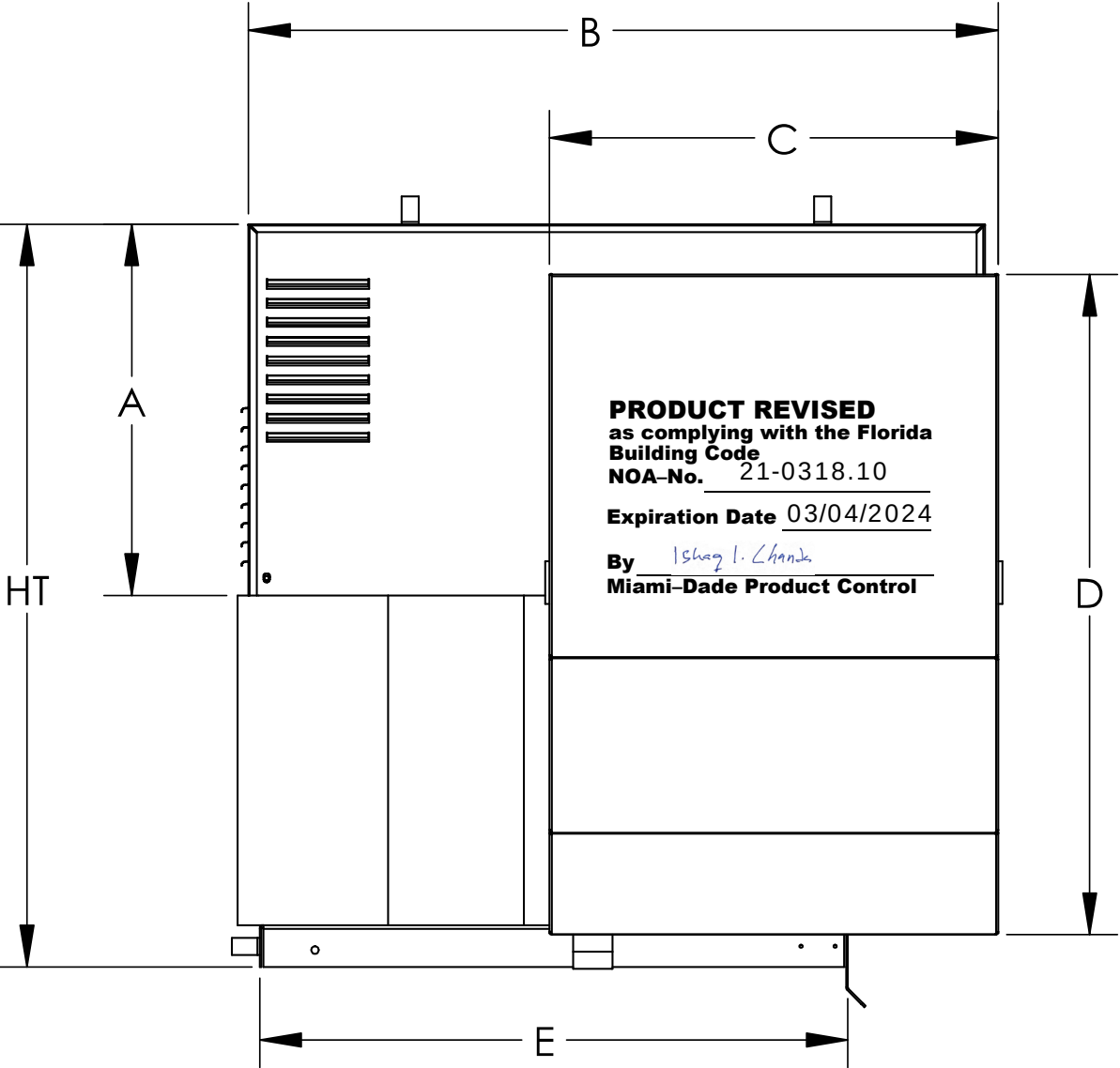
1. This NOA revises **NOA # 19-0717.09**, expiring 03/04/24.

*Ishaq I. Chanda*

---

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 21-0318.10**  
**Expiration Date: March 4, 2024**  
**Approval Date: July 22, 2021**

Dimensional Data - Steel Utility Set Exhaust



| 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          |

SEE PAGE 22 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.

|                       |                          |                            |
|-----------------------|--------------------------|----------------------------|
| Material: N/A         | Part Number: N/A         | Unless Otherwise Specified |
| Blank Size: N/A x N/A | MACOLA Number: N/A       | Dimensions are in Inches.  |
| Weight: N/A lbs       | Drawing Name: HRE SERIES | Standard Tolerances are:   |
|                       | Drawn By: N Perry        | Fractions: $\pm 1/16$      |
|                       | Drawing Number: NOA2-1   | Decimal: $.XX \pm .05$     |
|                       | Sheet: 1 of 22           | $.XX \pm .015$             |
|                       |                          | Angles: $\pm 1^\circ$      |

| 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  |

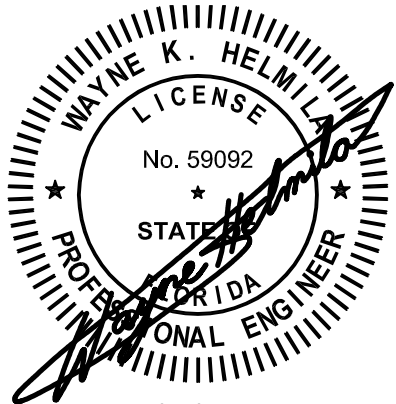
General Notes:

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  
Fax: (920) 617-1100  
www.rice-inc.com

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

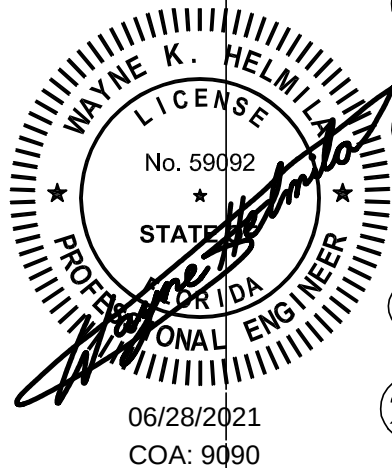


06/28/2021  
COA: 9090

|                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>RICE</b><br>ENGINEERING<br>105 School Creek Trail<br>Luxemburg, WI 54217<br>Phone: (920) 617-1042<br>Fax: (920) 617-1100<br>www.rice-inc.com                                                                                                                                                                                      |
| Notes:<br>•Steel structure assumed to be Fy = 50 ksi, 12 ga thickness minimum.<br>•Reference testing reports for unit design. RICE Engineering Inc. is responsible for anchoring of units to structure.<br>•All non-stainless steel fasteners/anchors must be sealed with Prosoco Liquid Flashing if exposed to exterior conditions. |

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

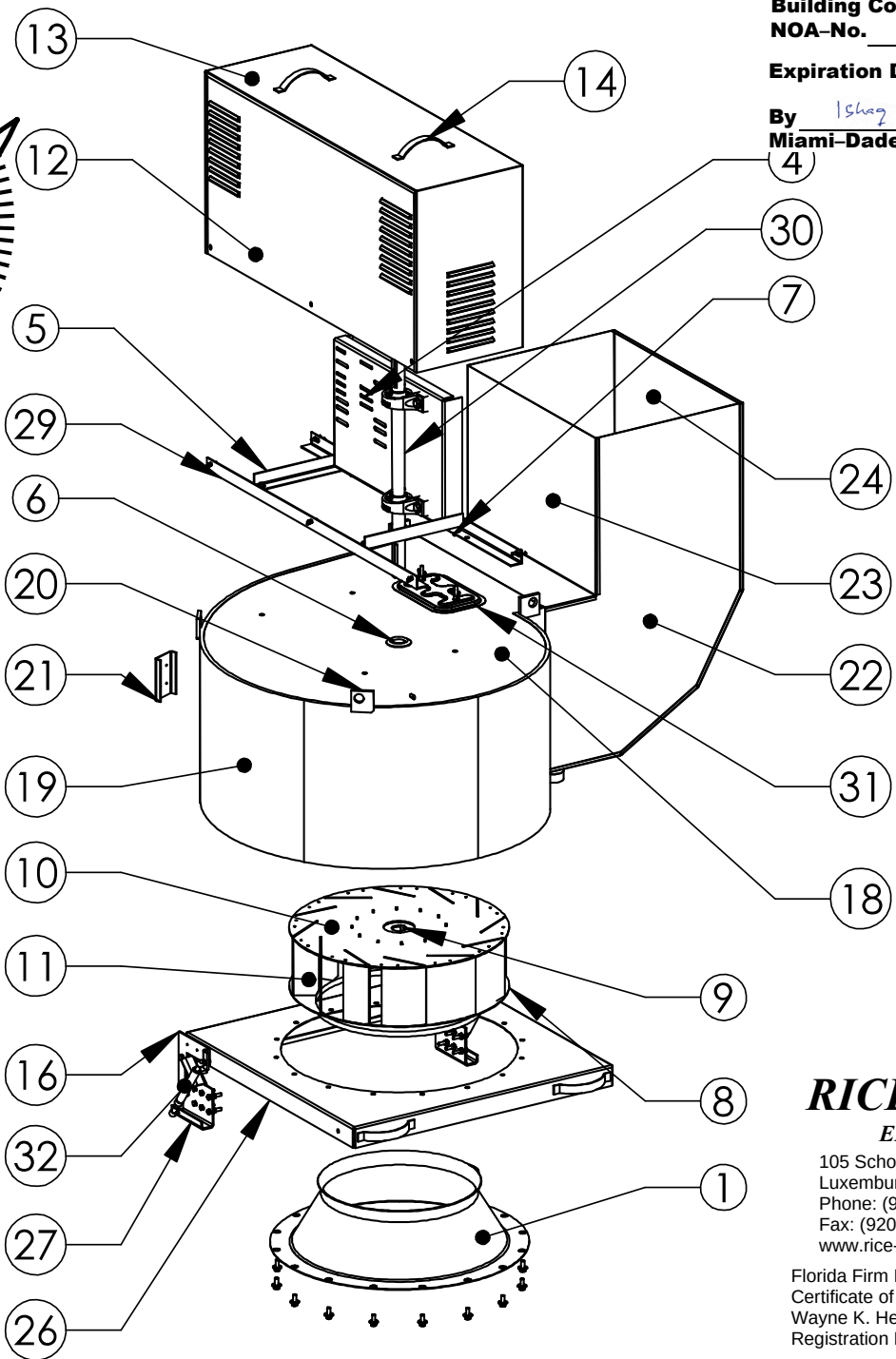




# Exploded Material View - Steel Utility Set Exhaust

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10  
Expiration Date 03/04/2024

By *Ishag I. Chande*  
**Miami-Dade Product Control**



**RICE**  
ENGINEERING

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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     |
| 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  |

| 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                         |

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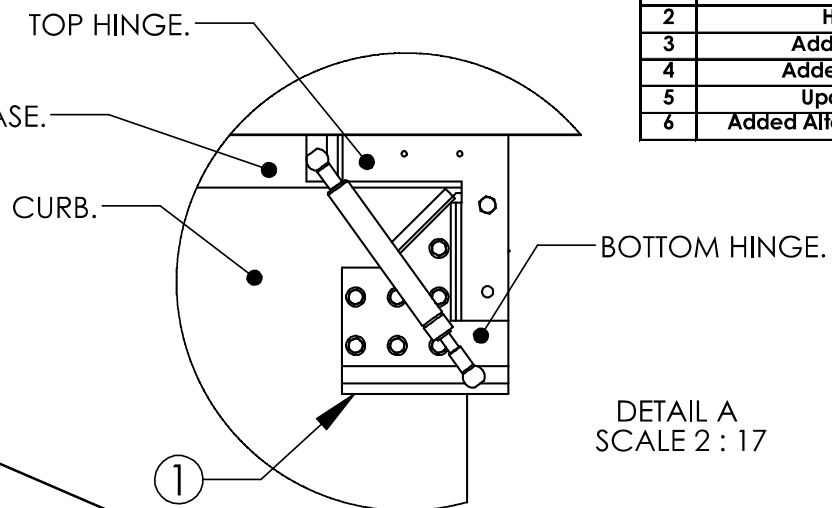
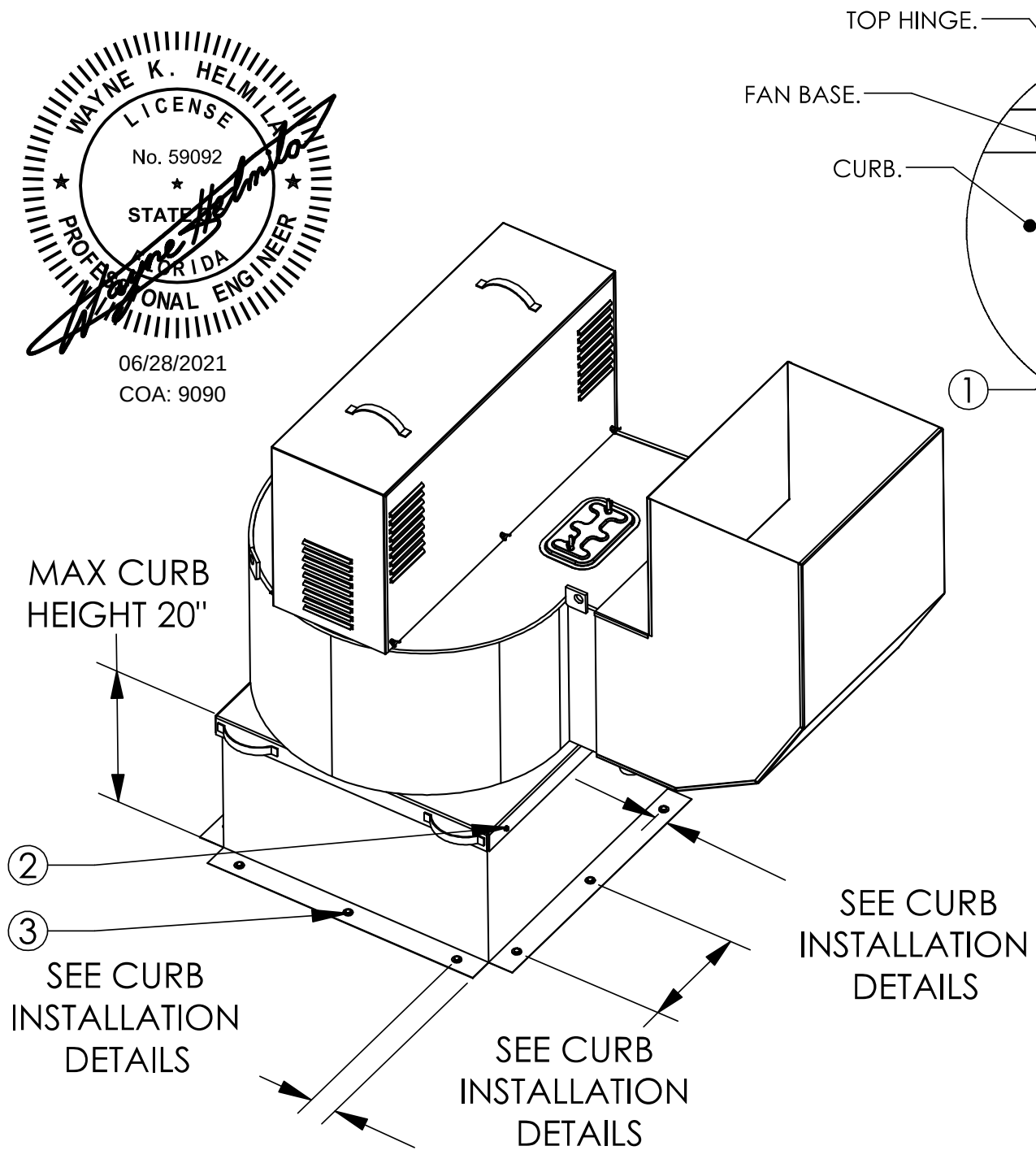
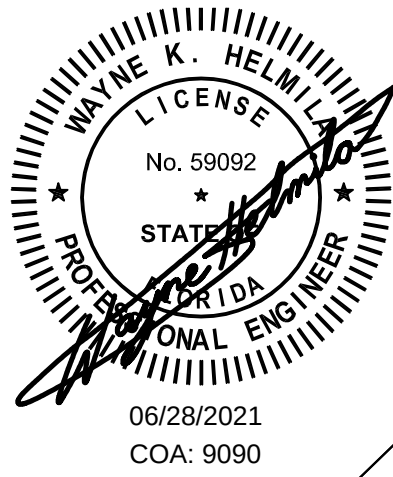
Material: N/A  
Blank Size: N/A x N/A  
Weight: N/A lbs

Part Number: N/A  
MACOLA Number: N/A  
Drawing Name: HRE SERIES  
Drawn By: N Perry  
Drawing Number: NOA2-2  
Sheet: 2 of 22

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

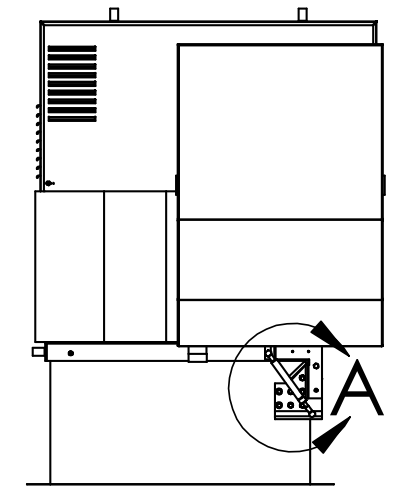
**CAPTIVEAIRE**  
THE PERFORMANCE COMPANY

Installation - Steel Utility Set Exhaust



DETAIL A  
SCALE 2 : 17

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10  
Expiration Date 03/04/2024  
By Ishaq I. Chande  
Miami-Dade Product Control



- 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.

**RICE**  
**ENGINEERING**  
105 School Creek Trail  
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Phone: (920) 617-1042  
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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 |
| Blank Size: N/A x N/A | MACOLA Number: N/A       | Dimensions are in Inches.  |
| Weight: N/A lbs       | Drawing Name: HRE SERIES | Standard Tolerances are:   |
|                       | Drawn By: N Perry        | Fractions: ±1/16           |
|                       | Drawing Number: NOA2-3   | Decimal: .XX±.05           |
|                       | Sheet: 3 of 22           | .XXX±.015                  |
|                       |                          | Angles: ±1°                |

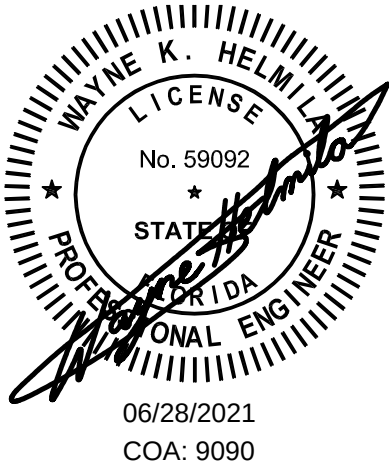


# Miami-Dade County - Roof Curb Installation Guide For Model HRE

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10  
Expiration Date 03/04/2024  
By *Ishag I. Chank*  
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 Alternative Brand to Drawings | JJH        | 3061 | 3/26/19  |
| 7                | Updated TZ to TZ2 Anchor            | JJH        | --   | 3/8/21   |

| 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"                                                |



| INSTALLATION FASTENER QTY |             |       |          |       |          |       |          |       |
|---------------------------|-------------|-------|----------|-------|----------|-------|----------|-------|
| Fan Model                 | Curb to Fan |       | Wood     |       | Steel    |       | Concrete |       |
|                           | 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    |

SEE PAGE 22 FOR ALTERNATE BRANDS

**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

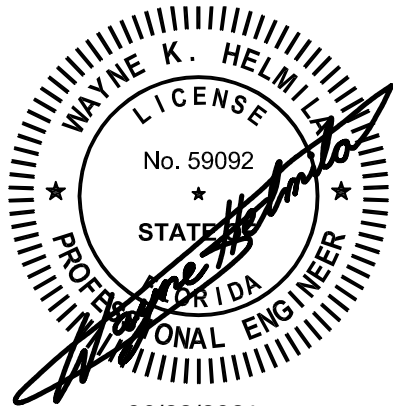
- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
  - 2. Tested for areas including high velocity hurricane zones.
  - 3. Tested under Miami-Dade County Notification number ATI 08034.

**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<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XXX±.015<br>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 22           |                                                                                                                                                             |



Dimensional Data - Steel Utility Set Exhaust



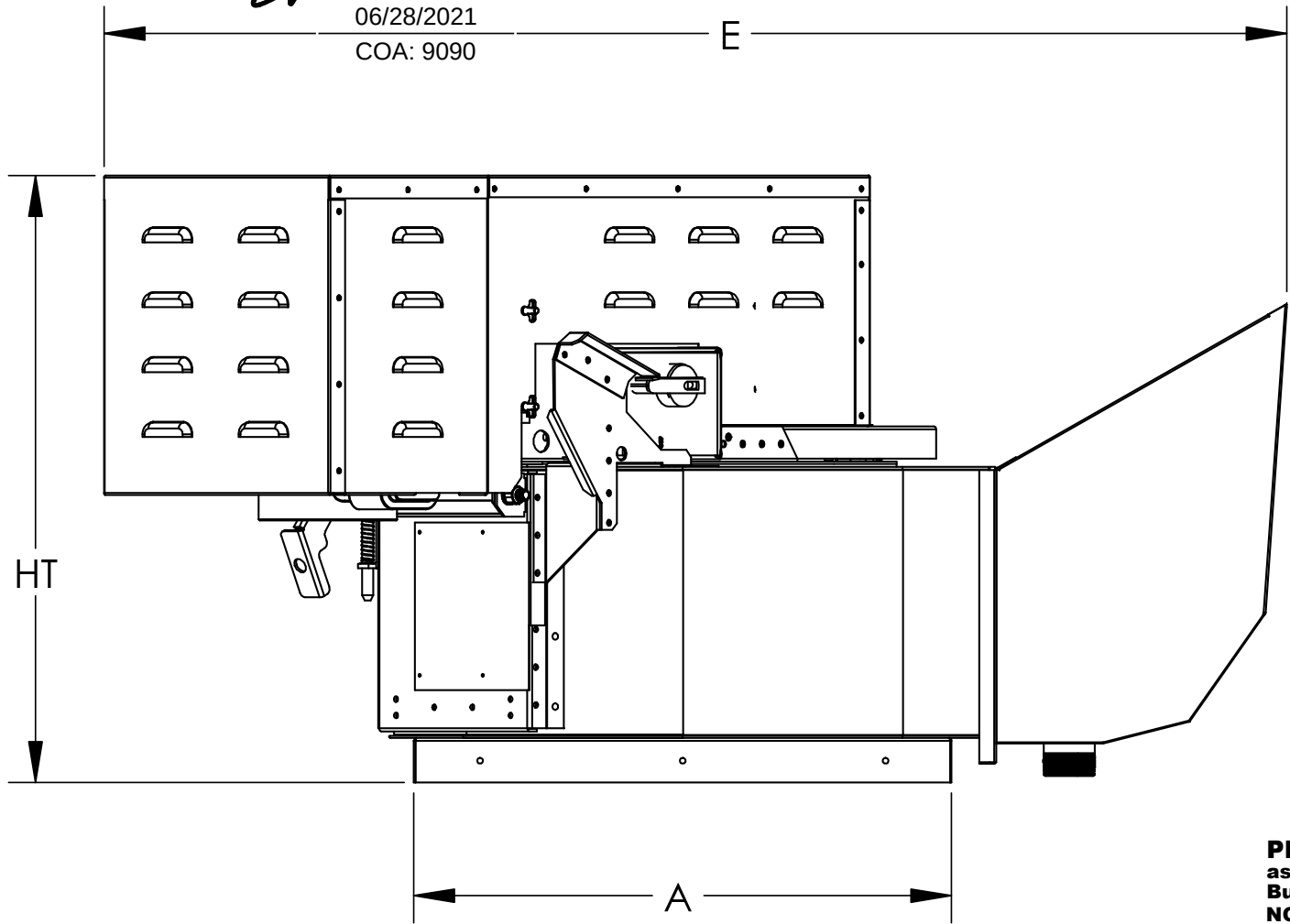
RICE

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www.rice-inc.com  
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  |

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 | 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          |

SEE PAGE 22 FOR ALTERNATE BRANDS

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

PRODUCT REVISED  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10

Expiration Date 03/04/2024

By Ishag I. Chanku  
Miami-Dade Product Control

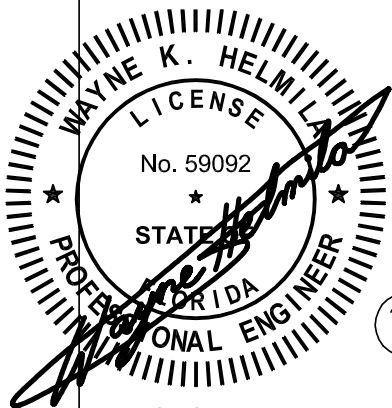
CaptiveAire, Inc. commercial kitchen ventilation  
4641 Paragon Park Road, Raleigh, NC 27616  
P 800.334.925 | F 919.227.5994

- 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.

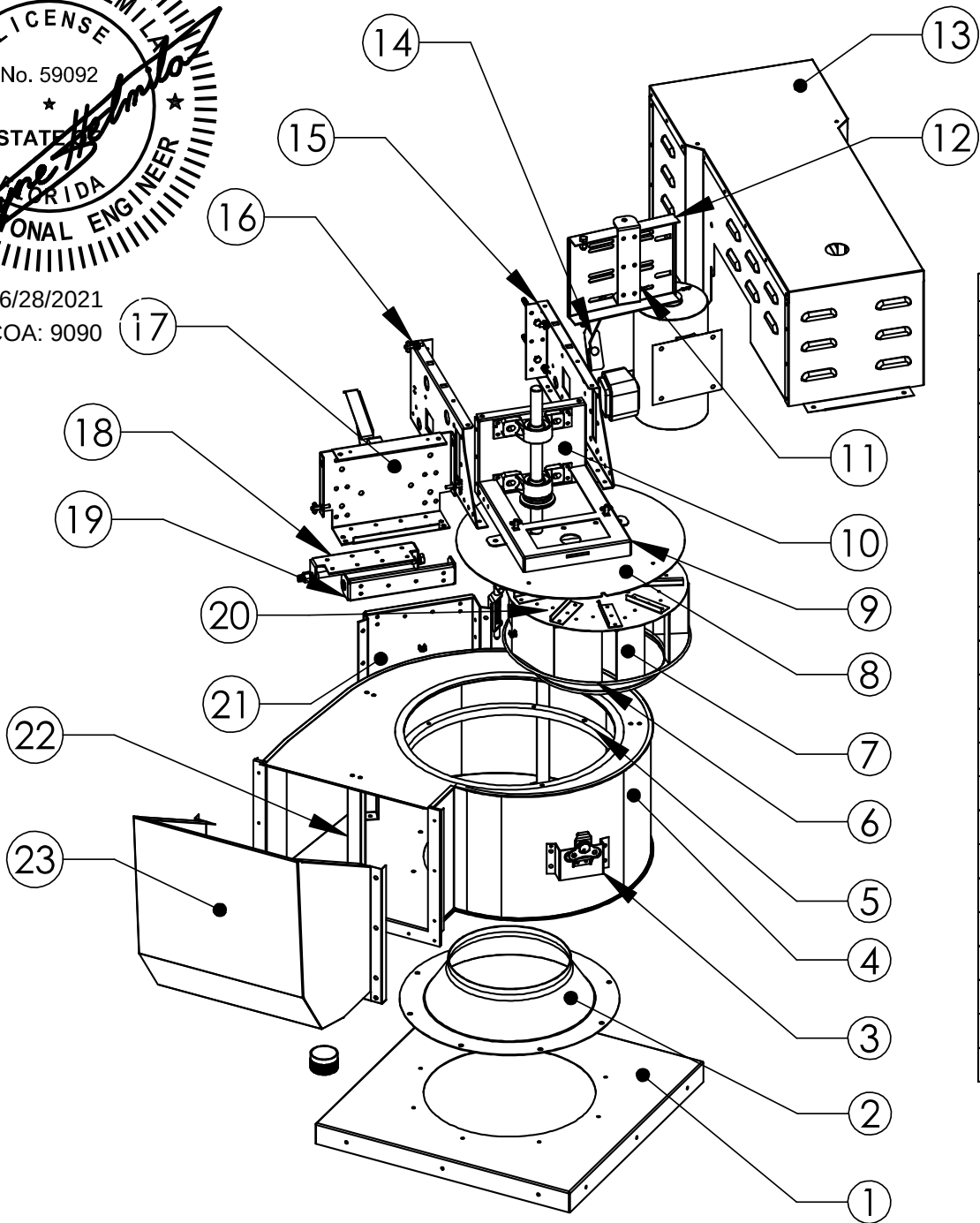
|                       |                         |                                                                                                                                                            |
|-----------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material: N/A         | Part Number: N/A        | Unless Otherwise Specified<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XX±.015<br>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 22          |                                                                                                                                                            |



Exploded Material View - Steel Utility Set Exhaust



06/28/2021  
COA: 9090



- 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.

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10  
Expiration Date 03/04/2024  
By Ishag I. Chandra  
Miami-Dade Product Control

| 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  |

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

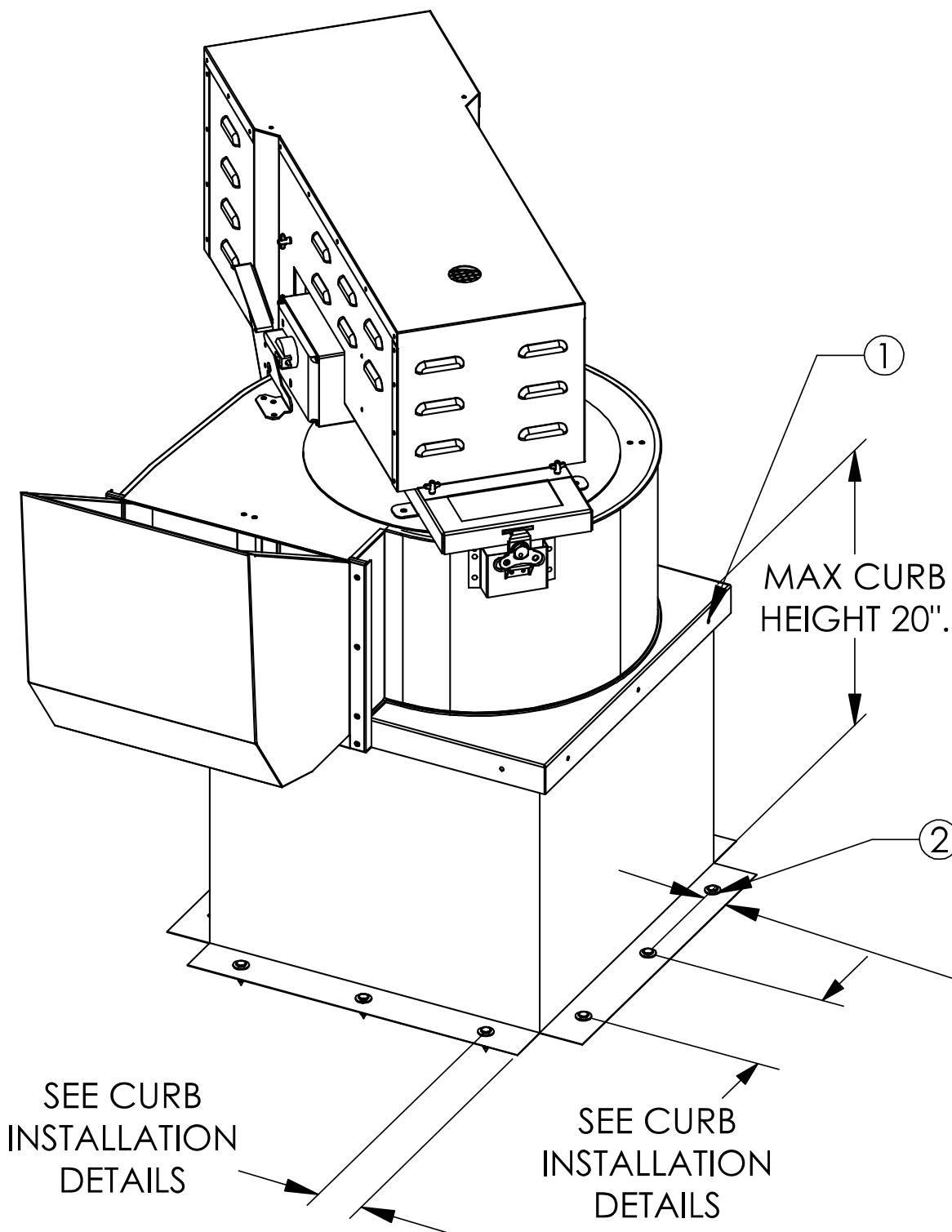
**CaptiveAire, Inc.** commercial kitchen ventilation  
4641 Paragon Park Road, Raleigh, NC 27616  
P 800.334.925 | F 919.227.5994

|                       |                         |                                                                                                                                                            |
|-----------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material: N/A         | Part Number: N/A        | Unless Otherwise Specified<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XX±.015<br>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: NOA2-6  |                                                                                                                                                            |
|                       | Sheet: 6 of 22          |                                                                                                                                                            |



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  |



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.

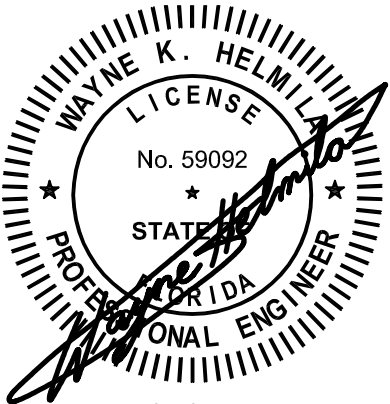
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10  
Expiration Date 03/04/2024  
By Ishaq I. Chande  
Miami-Dade Product Control

SEE CURB  
INSTALLATION  
DETAILS

**RICE**  
ENGINEERING

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Luxemburg, WI 54217  
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Florida Firm No: F-01000005061  
Certificate of Authorization: #9090  
Wayne K. Helmila  
Registration No: 59092



06/28/2021  
COA: 9090

- 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.

**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<br>Dimensions are in Inches. | <b>CAPTIVEAIRE</b><br>THE PERFORMANCE COMPANY |
| Blank Size: N/A x N/A | MACOLA/AX Number: N/A   | Standard Tolerances are:<br>Fractions: ±1/16            |                                               |
| Weight: N/A lbs       | Drawing Name: RE SERIES | Decimal: .XX±.05                                        |                                               |
|                       | Drawn By: N Perry       | .XX±.015                                                |                                               |
|                       | Drawing Number: NOA2-7  | Angles: ±1°                                             |                                               |
|                       | Sheet: 7 of 22          |                                                         |                                               |

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

**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. 21-0318.10  
Expiration Date 03/04/2024  
By Ishag I. Chande  
Miami-Dade Product Control

| 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   |

| 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"                                                |

| 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    | 4        | 16    | 4        | 16    | 3        | 12    |
| RE13DD                    | 3           | 12    | 3        | 12    | 3        | 12    | 3        | 12    |
| RE15BD                    | 3           | 12    | 4        | 16    | 4        | 16    | 3        | 12    |
| RE15DD                    | 3           | 12    | 4        | 16    | 3        | 12    | 3        | 12    |
| RE18BD                    | 3           | 12    | 4        | 16    | 4        | 16    | 3        | 12    |
| RE18DD                    | 3           | 12    | 4        | 16    | 4        | 16    | 3        | 12    |
| RE20BD                    | 3           | 12    | 5        | 20    | 4        | 16    | 4        | 16    |
| RE20DD                    | 3           | 12    | 4        | 16    | 4        | 16    | 3        | 12    |
| RE24BD                    | 3           | 12    | 5        | 20    | 5        | 20    | 4        | 16    |
| RE24DD                    | 3           | 12    | 5        | 20    | 5        | 20    | 4        | 16    |

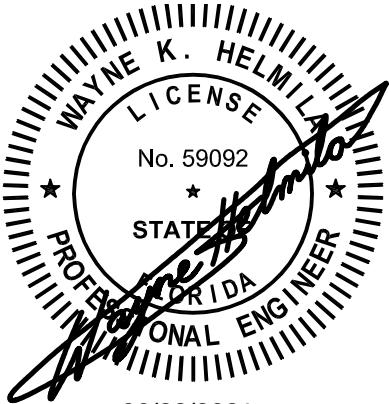
SEE PAGE 22 FOR ALTERNATE BRANDS

- 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.

**RICE**  
ENGINEERING

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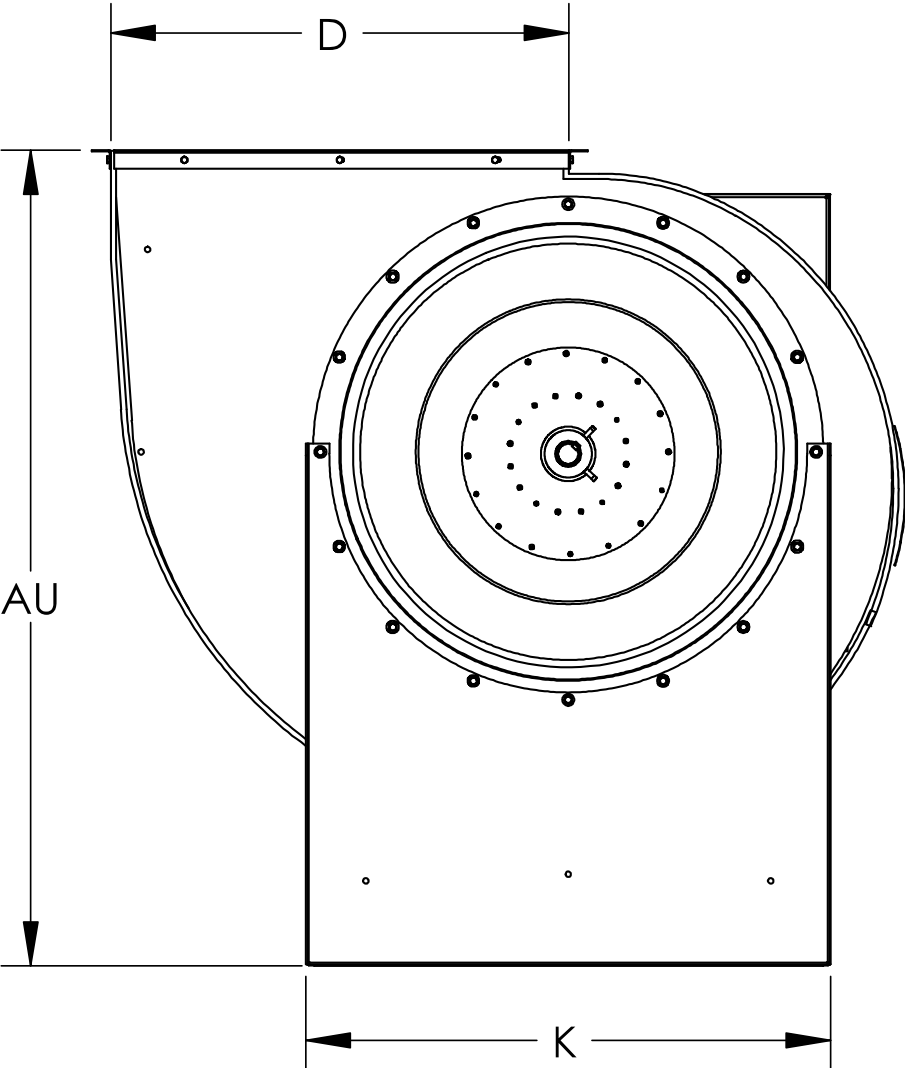
06/28/2021  
COA: 9090

**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<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XXX±.015<br>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 22         |                                                                                                                                                             |



Dimensional Data - Steel Utility Set Exhaust



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.

|                       |                                   |                            |
|-----------------------|-----------------------------------|----------------------------|
| Material: N/A         | Part Number: N/A                  | Unless Otherwise Specified |
| Blank Size: N/A x N/A | MACOLA Number: N/A                | Dimensions are in Inches.  |
| Weight: N/A lbs       | Drawing Name: BI, CB, USI, SERIES | Standard Tolerances are:   |
|                       | Drawn By: N Perry                 | Fractions: ±1/16           |
|                       | Drawing Number: NOA2-9            | Decimal: .XX±.05           |
|                       | Sheet: 9 of 22                    | .XX±.015                   |
|                       |                                   | Angles: ±1°                |

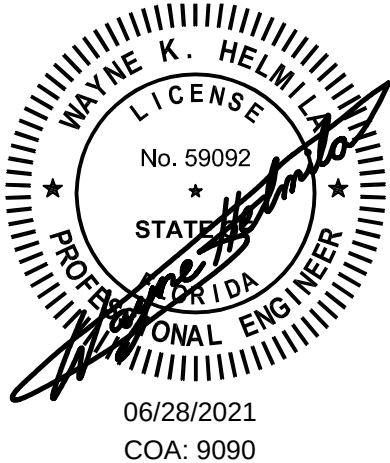
| Revision History |                                    |            |      |          |
|------------------|------------------------------------|------------|------|----------|
| #                | Description                        | Revised by | ECN# | Date     |
| 1                | Changes Per Dade 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  |

| 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 22 FOR ALTERNATE BRANDS

PRODUCT REVISED  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10  
Expiration Date 03/04/2024  
By Ishag I. Chande  
Miami-Dade Product Control

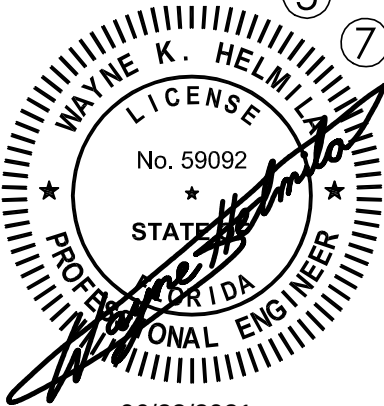
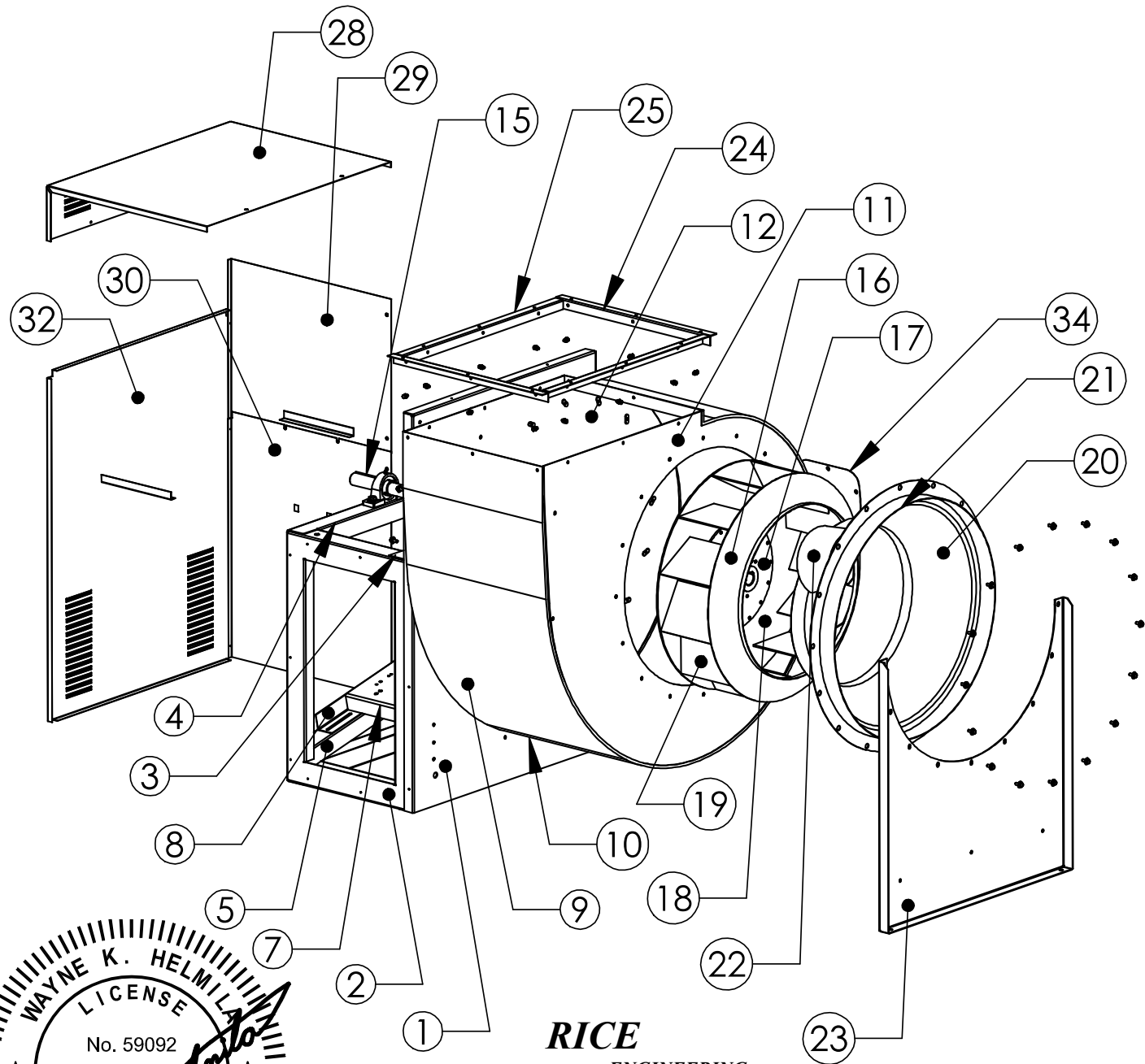
RICE  
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105 School Creek Trail  
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www.rice-inc.com  
Florida Firm No: F-01000005061  
Certificate of Authorization: #9090  
Wayne K. Helmila  
Registration No: 59092



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Exploded Material View - Steel Utility Set Exhaust



06/28/2021  
COA: 9090

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**PRODUCT REVISED**  
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NOA-No. 21-0318.10

Expiration Date 03/04/2024

By Ishay L. Chandra  
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 08034.

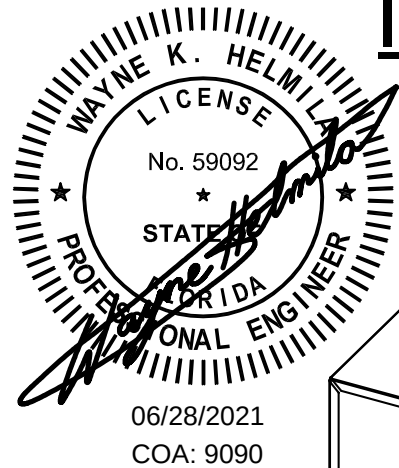
|                       |                                   |                                                                                                                                                                                        |
|-----------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material: N/A         | Part Number: N/A                  | Unless Otherwise Specified<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: $\pm 1/16$<br>Decimal: $.XX \pm .05$<br>$.XXX \pm .015$<br>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 22                   |                                                                                                                                                                                        |

| 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  |

| 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          |

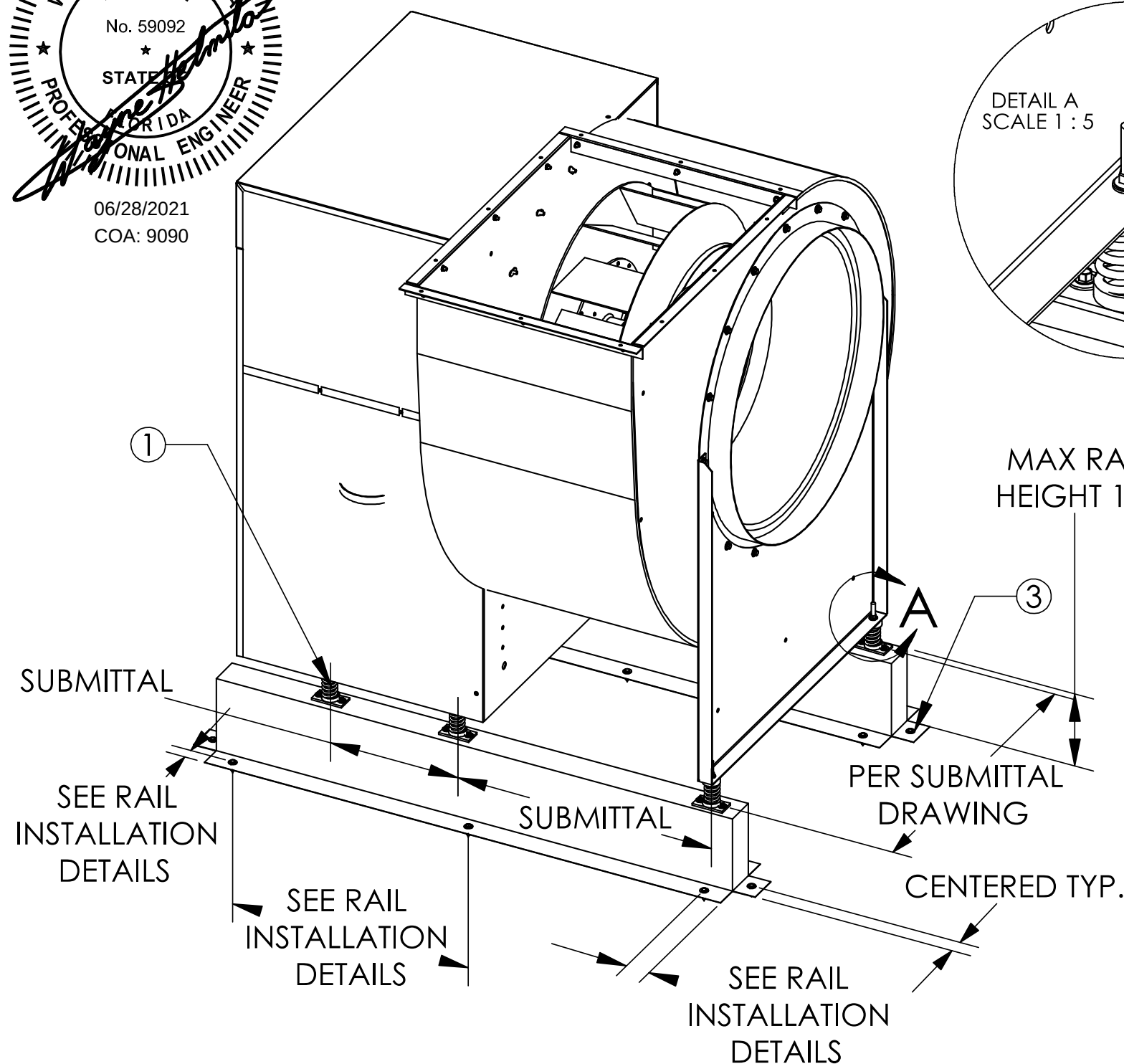
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# Installation - Steel Utility Set Exhaust

| 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  |



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.

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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. 21-0318.10

Expiration Date 03/04/2024

By Ishag I. Chank  
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 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: BI, CB, USI, SERIES  
Drawn By: N Perry  
Drawing Number: NOA2-11  
Sheet: 11 of 22

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**  
THE PERFORMANCE COMPANY

**CaptiveAire, Inc. commercial kitchen ventilation**  
4641 Paragon Park Road, Raleigh, NC 27616  
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# 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   |

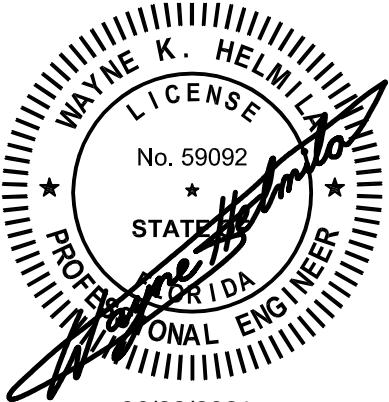
| INSTALLATION FASTENER TYPES |                                |                                          |                                                      |
|-----------------------------|--------------------------------|------------------------------------------|------------------------------------------------------|
|                             | Wood (SG = 0.42 Min.)          | Steel (12 Gauge Min.)                    | Concrete (2500 psi Min.<br>Cracked Concrete)         |
| Fastener                    | 3/8" Dia. Zinc Plated Lag Bolt | 1/4"-14 Dril-Flex Self<br>Drilling Screw | 3/8" Dia. SS Hilti Kwik Bolt<br>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"                                                  |

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



06/28/2021  
COA: 9090

| INSTALLATION FASTENER QTY |           |            |       |           |            |       |           |            |       |
|---------------------------|-----------|------------|-------|-----------|------------|-------|-----------|------------|-------|
|                           | Wood      |            |       | Steel     |            |       | Concrete  |            |       |
| Fan Model                 | 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    |

SEE PAGE 22 FOR ALTERNATE BRANDS

**PRODUCT REVISED**  
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NOA-No. 21-0318.10

Expiration Date 03/04/2024

By Ishag I. Chande  
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 08034.

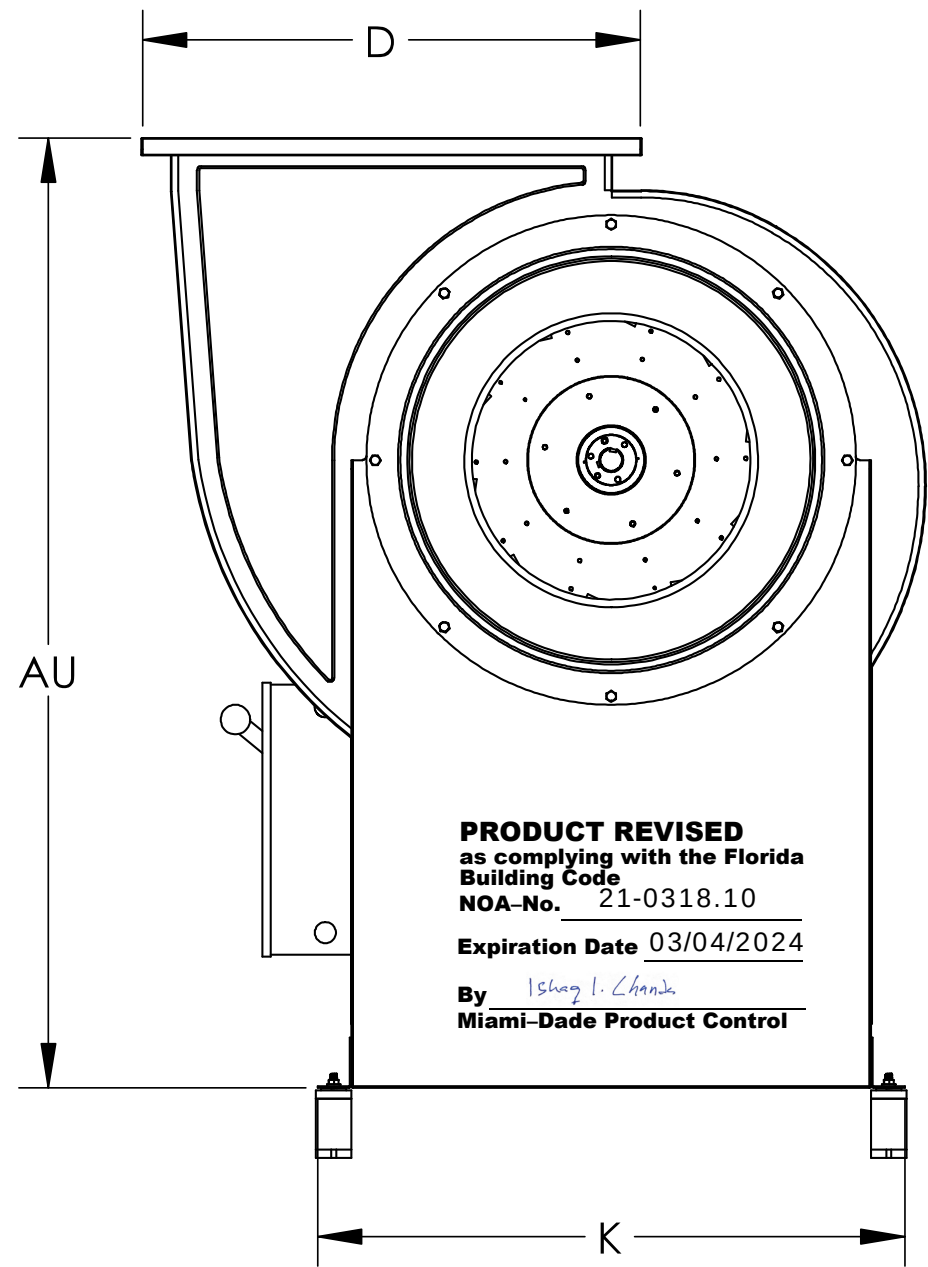
| INSTALLATION FASTENER QTY |           |            |       |           |            |       |           |            |       |
|---------------------------|-----------|------------|-------|-----------|------------|-------|-----------|------------|-------|
|                           | Wood      |            |       | Steel     |            |       | Concrete  |            |       |
| Fan Model                 | 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    |

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|                       |                                   |                                                                                                                                                             |
|-----------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material: N/A         | Part Number: N/A                  | Unless Otherwise Specified<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XXX±.015<br>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: NOA2-12           |                                                                                                                                                             |
|                       | Sheet: 12 of 22                   |                                                                                                                                                             |

**CAPTIVEAIRE**  
THE PERFORMANCE COMPANY

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.

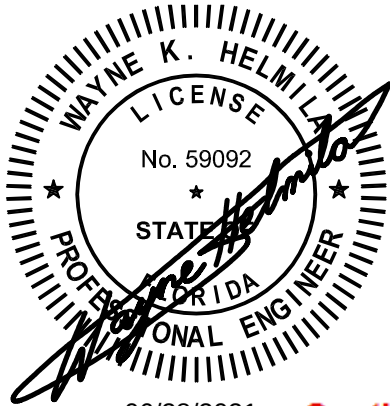
| Revision History |                                    |            |      |          |
|------------------|------------------------------------|------------|------|----------|
| #                | Description                        | Revised by | ECN# | Date     |
| 1                | Changes Per Dade 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  |

- 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 22 FOR ALTERNATE BRANDS

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



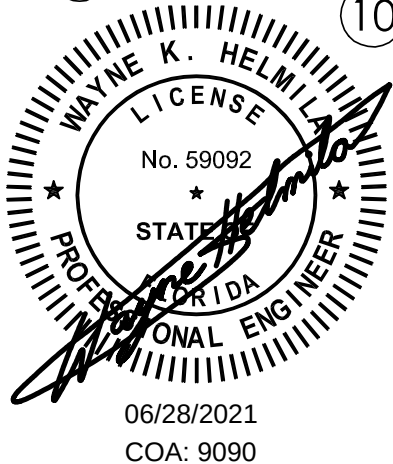
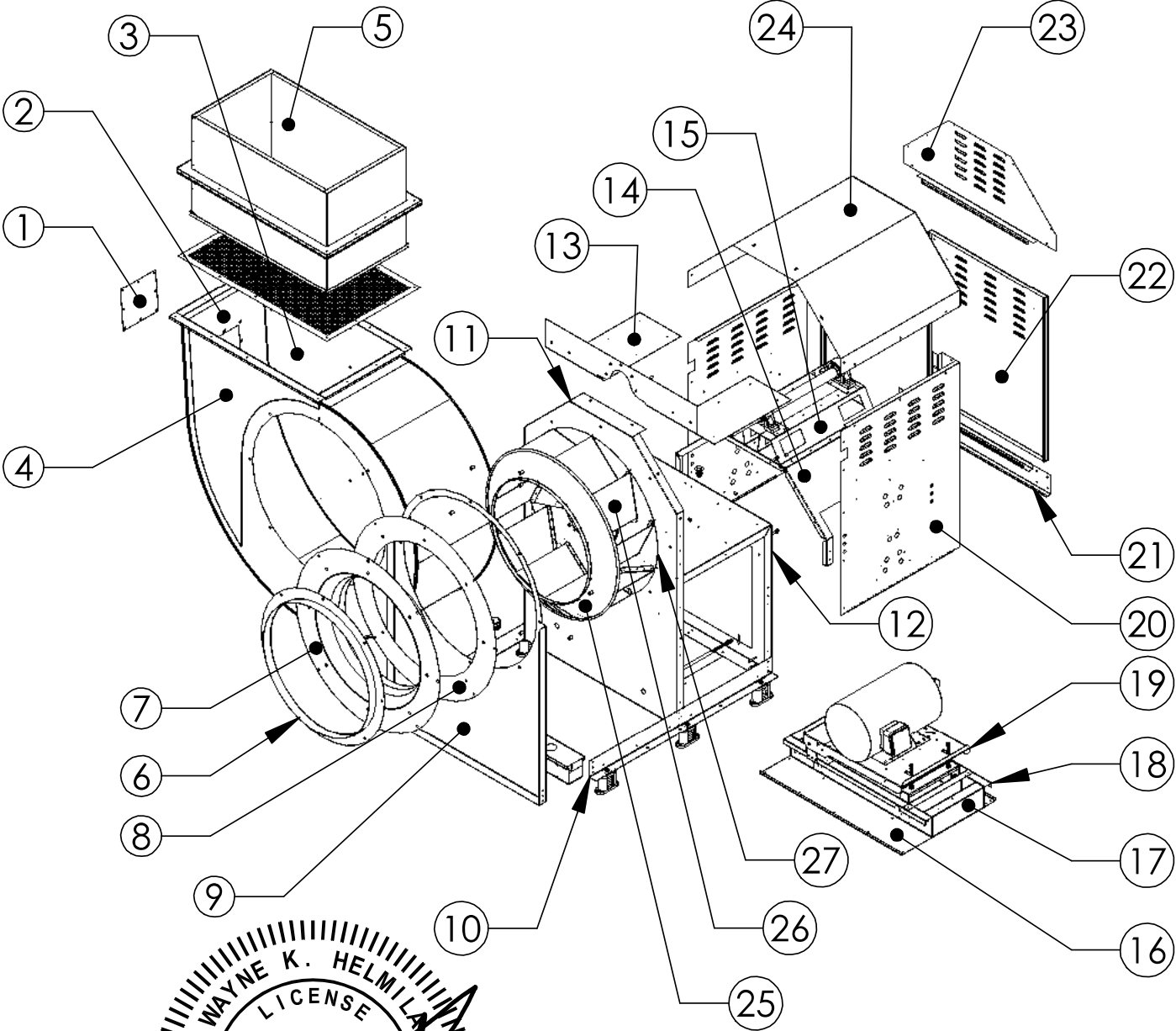
06/28/2021  
COA: 9090

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|                       |                           |                                                                                                                                                             |
|-----------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material: N/A         | Part Number: N/A          | Unless Otherwise Specified<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XXX±.015<br>Angles: ±1° |
| Blank Size: N/A x N/A | MACOLA/AX Number: N/A     |                                                                                                                                                             |
| Weight: N/A lbs       | Drawing Name: USBI SERIES |                                                                                                                                                             |
| CONFIDENTIAL          | Drawn By: N Perry         |                                                                                                                                                             |
|                       | Parent Assembly: NOA2-13  |                                                                                                                                                             |
| Sheet: 13 of 22       |                           | <b>CAPTIVEAIRE</b><br>THE PERFORMANCE COMPANY                                                                                                               |

Exploded Material View - Steel Utility Set Exhaust



**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
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Expiration Date 03/04/2024  
By Ishaq I. Chande  
Miami-Dade Product Control

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| 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  |

| 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 SUPPPORT 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

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

- 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<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XXX±.015<br>Angles: ±1° |
| Blank Size: N/A x N/A | MACOLA/AX Number: N/A     |                                                                                                                                                             |
| Weight: N/A lbs       | Drawing Name: USBI SERIES |                                                                                                                                                             |
| CONFIDENTIAL          | Drawn By: N Perry         |                                                                                                                                                             |
|                       | Parent Assembly: NOA2-14  |                                                                                                                                                             |
| Sheet: 14 of 22       |                           | CAPTIVEAIRE<br>THE PERFORMANCE COMPANY                                                                                                                      |

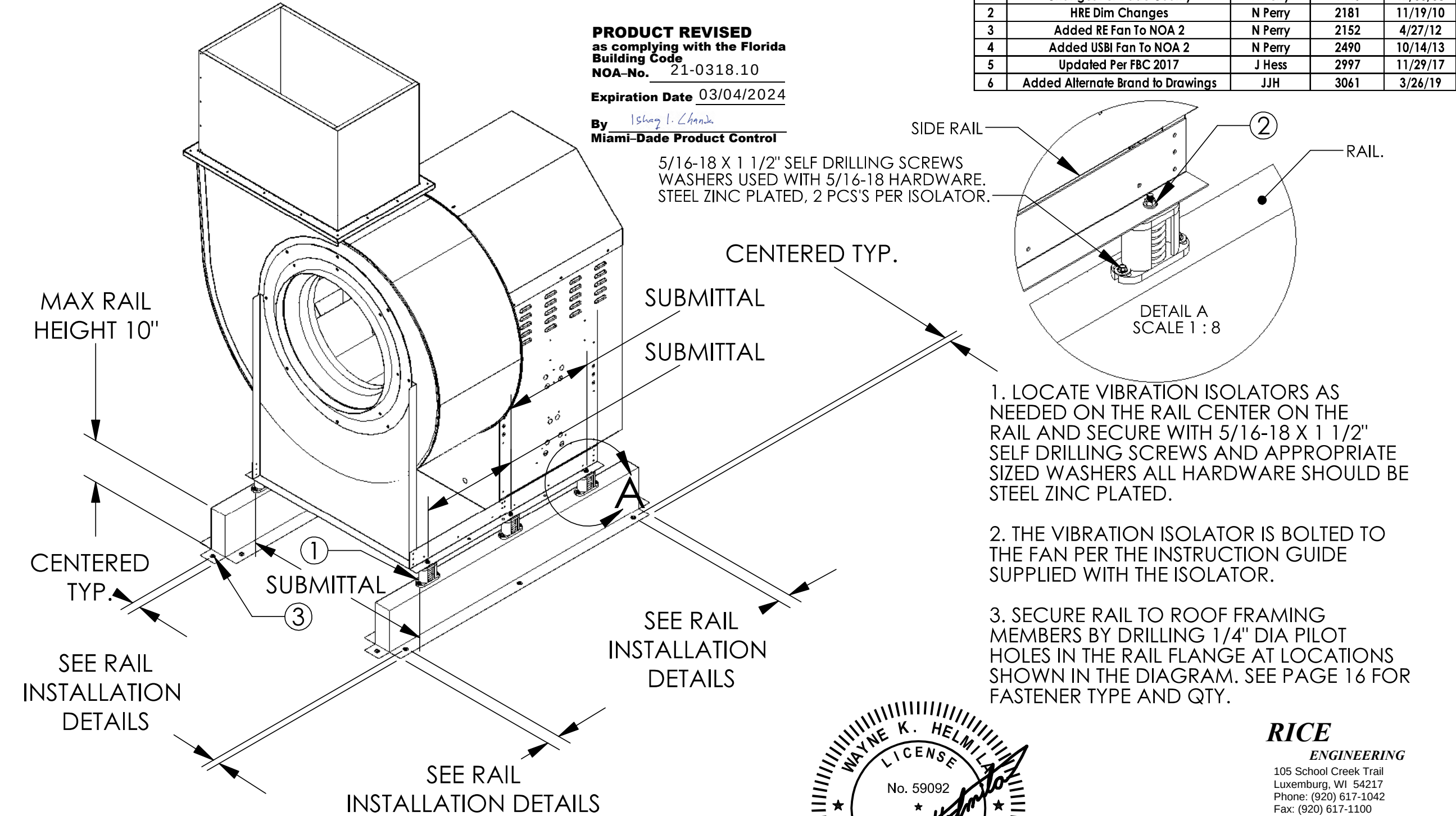
Installation - Steel Utility Set Exhaust

PRODUCT REVISED  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10

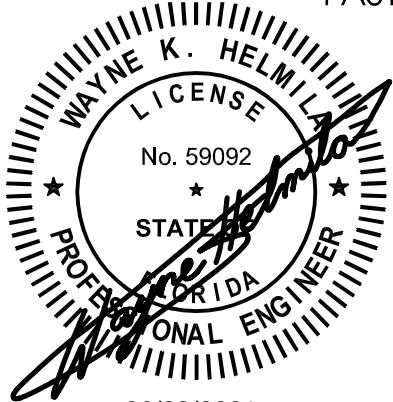
Expiration Date 03/04/2024

By Ishag I. Chande  
Miami-Dade Product Control

| 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  |



- 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.



06/28/2021  
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

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          |
| Blank Size: N/A x N/A | MACOLA/AX Number: N/A     |
| Weight: N/A lbs       | Drawing Name: USBI SERIES |
| CONFIDENTIAL          | Drawn By: N Perry         |
|                       | Parent Assembly: NOA2-15  |
|                       | Sheet: 15 of 22           |

Unless Otherwise Specified  
Dimensions are in Inches.

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



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

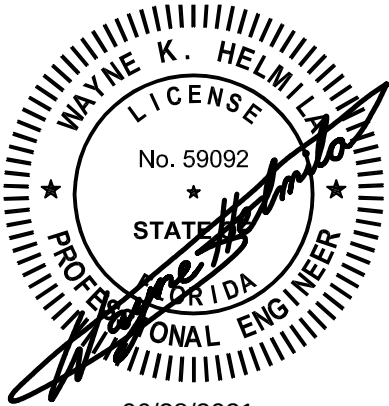
| Revision History |                                    |            |      |          |
|------------------|------------------------------------|------------|------|----------|
| #                | Description                        | Revised by | ECN# | Date     |
| 1                | Changes Per Dade County            | N Perry    | 1446 | 12/30/08 |
| 2                | HRE Dim Changes                    | N Perry    | 2181 | 11/19/10 |
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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                | Changed TZ to TZ2 Anchor           | JJH        | --   | 3/8/21   |

| INSTALLATION FASTENER TYPES |                                |                                       |                                                   |
|-----------------------------|--------------------------------|---------------------------------------|---------------------------------------------------|
|                             | 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"                                                |

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10  
Expiration Date 03/04/2024  
By Ishaq I. Chanda  
Miami-Dade Product Control

| INSTALLATION FASTENER QTY |           |            |       |           |            |       |           |            |       |
|---------------------------|-----------|------------|-------|-----------|------------|-------|-----------|------------|-------|
|                           | Wood      |            |       | Steel     |            |       | Concrete  |            |       |
| Fan Model                 | 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    |

**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



06/28/2021  
COA: 9090

SEE PAGE 22 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.

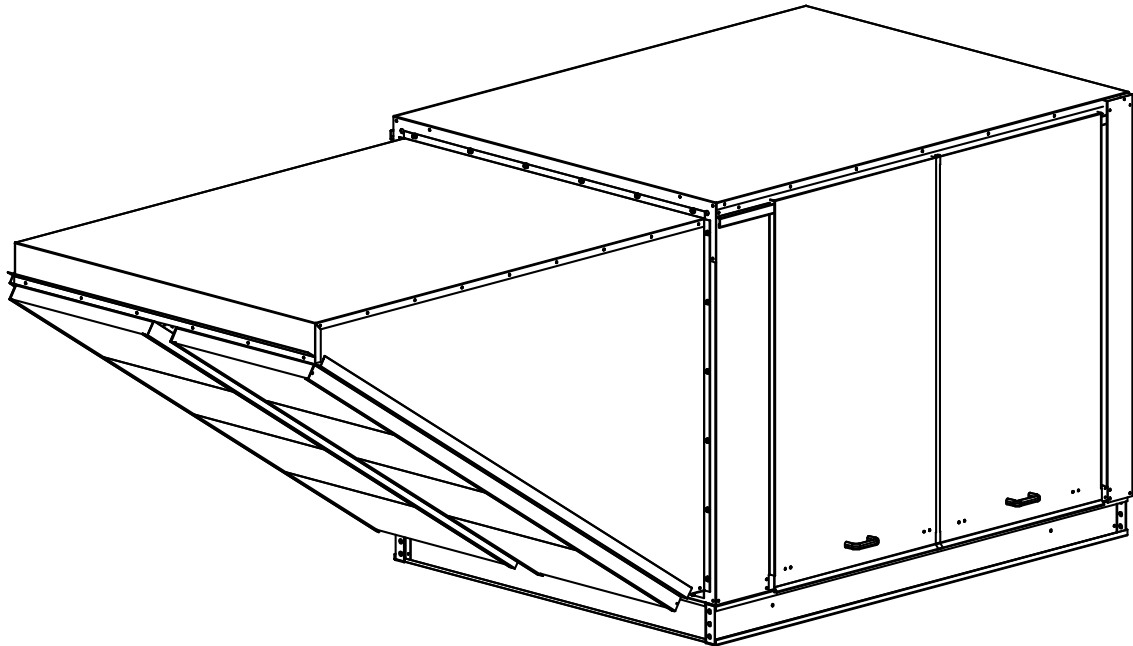
**CaptiveAire, Inc. commercial kitchen ventilation**  
4641 Paragon Park Road, Raleigh, NC 27616  
P 800.334.925 | F 919.227.5994

|                       |                           |                                                                                                                                                             |
|-----------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material: N/A         | Part Number: N/A          | Unless Otherwise Specified<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XXX±.015<br>Angles: ±1° |
| 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 22           |                                                                                                                                                             |



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.



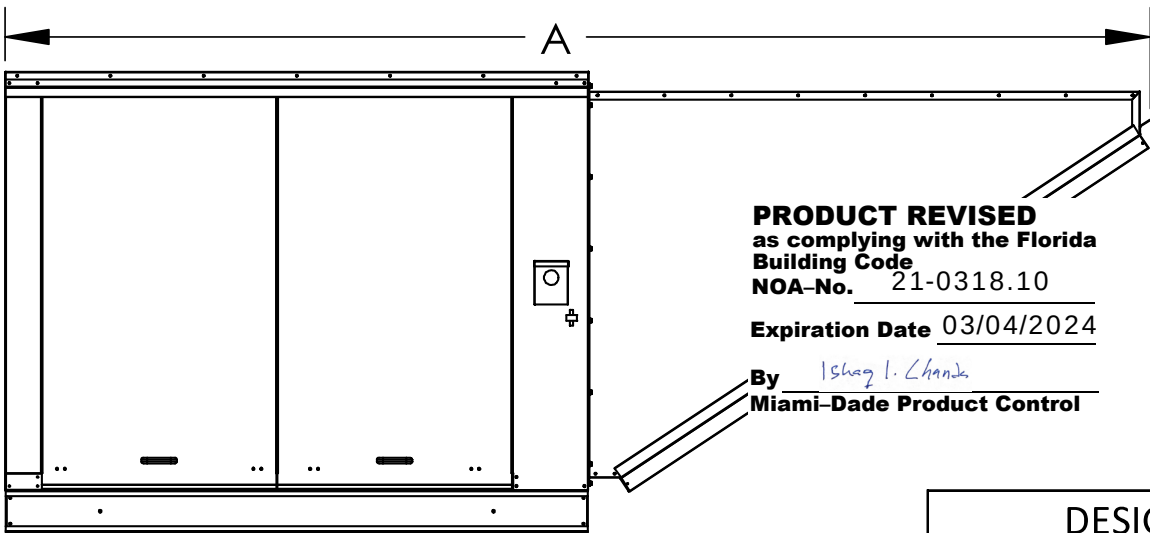
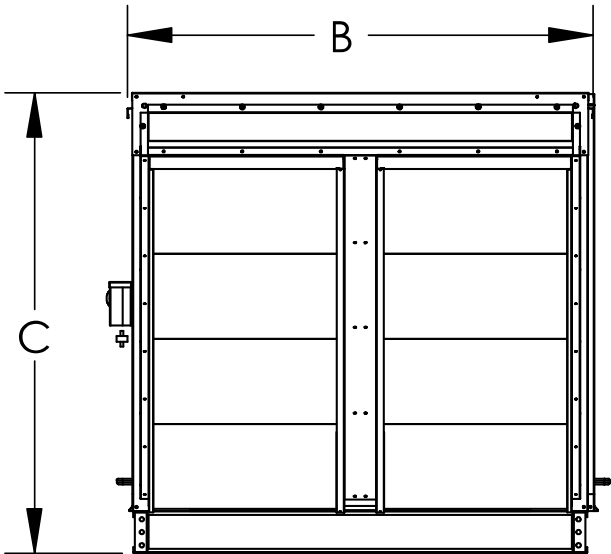
RICE  
ENGINEERING

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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  |

| 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          |

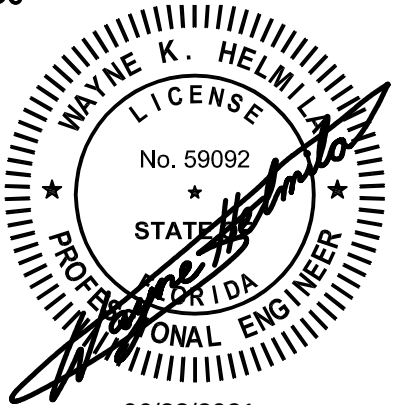
SEE PAGE 22 FOR ALTERNATE BRANDS



PRODUCT REVISED  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10

Expiration Date 03/04/2024

By Ishag I. Chank  
Miami-Dade Product Control



06/28/2021  
COA: 9090

DESIGN PRESSURE: +30.0 / -130.0 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<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XXX±.015<br>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: NOA2-17 |                                                                                                                                                             |
|                       | Sheet: 17 of 22         |                                                                                                                                                             |

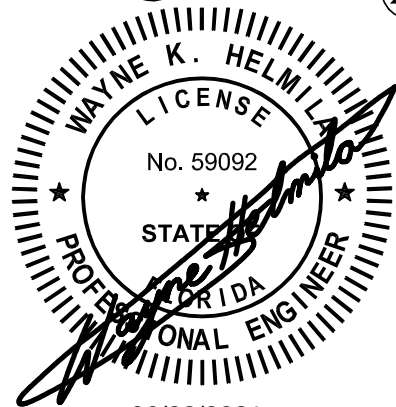
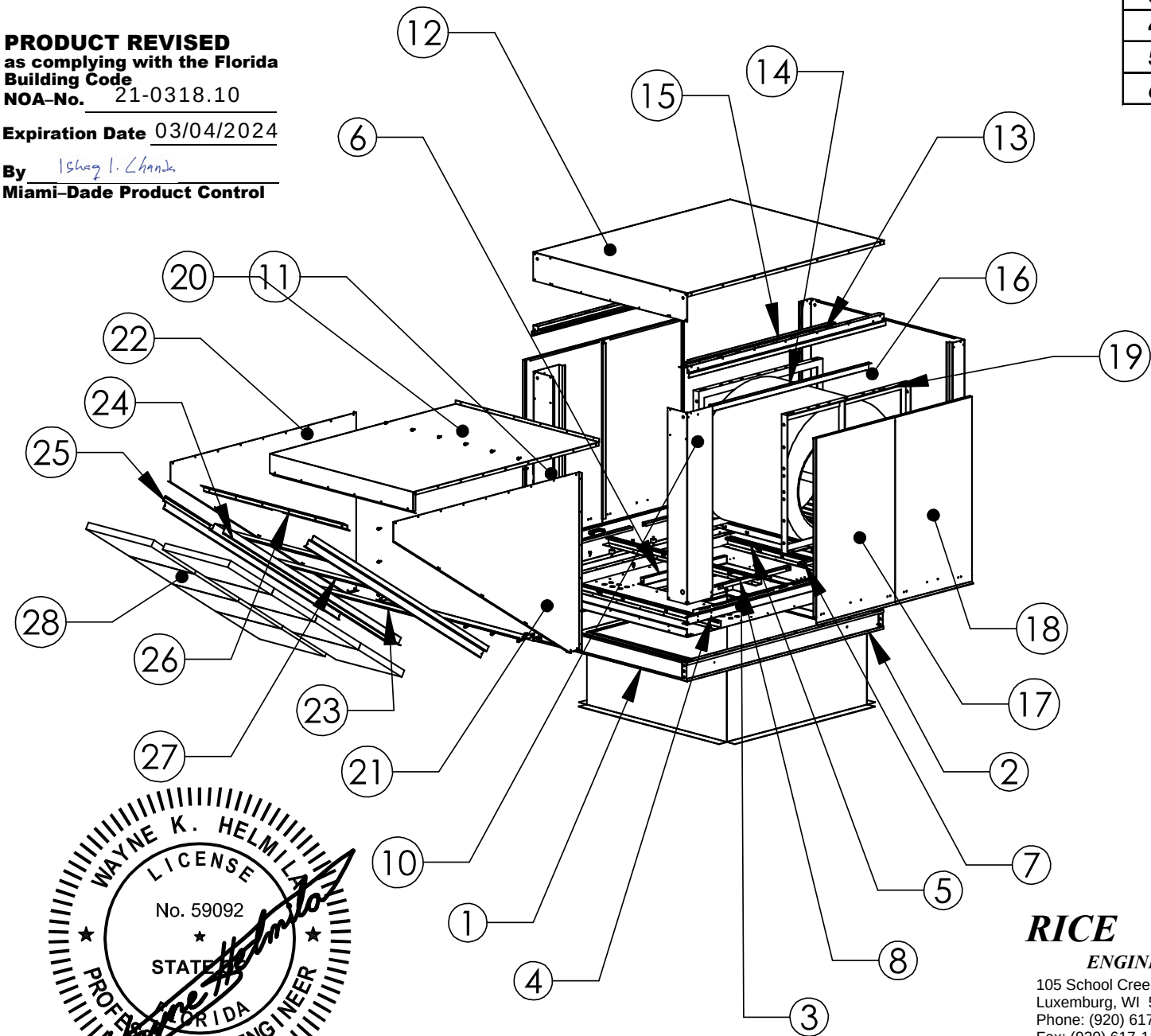


Materials - A Series Steel Supply Fans

PRODUCT REVISED  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10

Expiration Date 03/04/2024

By Ishag I. Chande  
Miami-Dade Product Control



06/28/2021  
COA: 9090

- 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  |

| 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        |

RICE  
ENGINEERING

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Registration No: 59092

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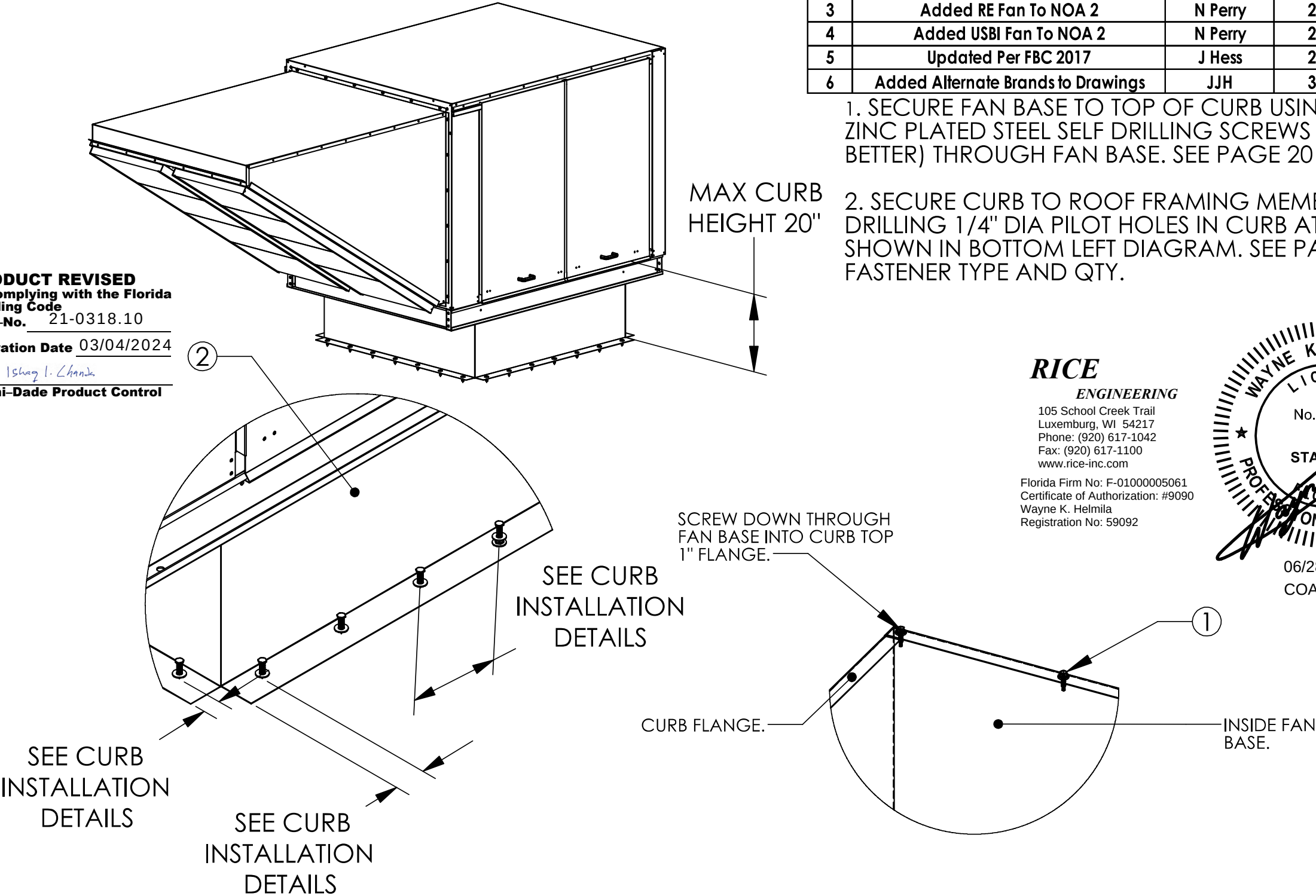
|                       |                         |                                                                                                                                                             |
|-----------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material: N/A         | Part Number: N/A        | Unless Otherwise Specified<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XXX±.015<br>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: NOA2-18 |                                                                                                                                                             |
|                       | Sheet: 18 of 22         |                                                                                                                                                             |



Installation - A Series Steel Supply Fans

| Revision History |                                    |            |      |          |
|------------------|------------------------------------|------------|------|----------|
| #                | Description                        | Revised by | ECN# | Date     |
| 1                | Changes Per Dade County            | N Perry    | 1446 | 12/30/08 |
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PRODUCT REVISED  
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NOA-No. 21-0318.10  
Expiration Date 03/04/2024  
By Ishag I. Chande  
Miami-Dade Product Control

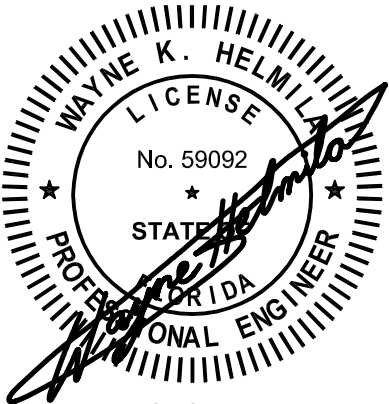


1. SECURE FAN BASE TO TOP OF CURB USING 1/4-14 X 1" ZINC PLATED STEEL SELF DRILLING SCREWS (A307 OR BETTER) THROUGH FAN BASE. SEE PAGE 20 FOR QTY.
2. SECURE CURB TO ROOF FRAMING MEMBERS BY DRILLING 1/4" DIA PILOT HOLES IN CURB AT LOCATION SHOWN IN BOTTOM LEFT DIAGRAM. SEE PAGE 20 FOR FASTENER TYPE AND QTY.

RICE

ENGINEERING

105 School Creek Trail  
Luxemburg, WI 54217  
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Fax: (920) 617-1100  
www.rice-inc.com  
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Certificate of Authorization: #9090  
Wayne K. Helmila  
Registration No: 59092



06/28/2021  
COA: 9090

- 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: A5-925     | Unless Otherwise Specified<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: $\pm 1/16$<br>Decimal: $.XX \pm .05$<br>$.XXX \pm .015$<br>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: NOA2-19 |                                                                                                                                                                                        |
|                       | Sheet: 19 of 22         |                                                                                                                                                                                        |



# 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   |

| 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" 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                              | 2-5/16"                                           |
| 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"                                  | 7"                                                |

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10

Expiration Date 03/04/2024

By Ishag I. Lhanda  
Miami-Dade Product Control

| 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    | 4         | 3        | 14    | 3         | 2          | 10    |
| Modular 2                 | 3           | 2          | 10    | 5         | 4          | 18    | 4         | 3        | 14    | 4         | 3          | 14    |
| Modular 3                 | 4           | 3          | 14    | 6         | 5          | 22    | 5         | 4        | 18    | 5         | 4          | 18    |
| Modular 4                 | 6           | 4          | 20    | 10        | 8          | 36    | 8         | 6        | 28    | 8         | 6          | 28    |
| Modular 5                 | 7           | 5          | 24    | 12        | 9          | 42    | 9         | 7        | 32    | 9         | 7          | 32    |
| Direct Fired 1            | 5           | 2          | 14    | 8         | 3          | 22    | 6         | 2        | 16    | 7         | 2          | 18    |
| Direct Fired 2            | 4           | 2          | 12    | 9         | 4          | 26    | 7         | 3        | 20    | 8         | 3          | 22    |
| Direct Fired 3            | 5           | 2          | 14    | 10        | 5          | 30    | 8         | 4        | 24    | 9         | 4          | 26    |
| Direct Fired 4            | 9           | 3          | 24    | 19        | 8          | 54    | 13        | 5        | 36    | 14        | 6          | 40    |
| Direct Fired 5            | 10          | 4          | 28    | 21        | 9          | 60    | 14        | 6        | 40    | 16        | 7          | 46    |
| Electric 1                | 5           | 2          | 14    | 8         | 3          | 22    | 6         | 2        | 16    | 7         | 2          | 18    |
| Electric 2                | 4           | 2          | 12    | 9         | 4          | 26    | 7         | 3        | 20    | 8         | 3          | 22    |
| Electric 3                | 5           | 2          | 14    | 10        | 5          | 30    | 8         | 4        | 24    | 9         | 4          | 26    |
| Electric 4                | 9           | 3          | 24    | 19        | 8          | 54    | 13        | 5        | 36    | 14        | 6          | 40    |
| Electric 5                | 10          | 4          | 28    | 21        | 9          | 60    | 14        | 6        | 40    | 16        | 7          | 46    |
| Indirect 1                | 10          | 4          | 28    | 17        | 7          | 48    | 14        | 6        | 40    | 12        | 5          | 34    |
| Indirect 2                | 9           | 5          | 28    | 15        | 8          | 46    | 13        | 7        | 40    | 13        | 7          | 40    |
| Indirect 3                | 12          | 4          | 32    | 22        | 8          | 60    | 16        | 6        | 44    | 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 22 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.

Material: N/A

Blank Size: N/A x N/A

Weight: N/A lbs

Part Number: N/A

MACOLA Number: N/A

Drawing Name: SUPPLY

Drawn By: N Perry

Drawing Number: NOA2-20

Sheet: 20 of 22

Unless Otherwise Specified  
Dimensions are in Inches.

Standard Tolerances are:

Fractions:  $\pm 1/16$

Decimal:  $.XX \pm .05$

$.XX \pm .015$

Angles:  $\pm 1^\circ$

CaptiveAire, Inc. commercial kitchen ventilation

4641 Paragon Park Road, Raleigh, NC 27616

P 800.334.925 | F 919.227.5994

**CAPTIVEAIRE**  
THE PERFORMANCE COMPANY

**RICE**

ENGINEERING

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Luxemburg, WI 54217

Phone: (920) 617-1042

Fax: (920) 617-1100

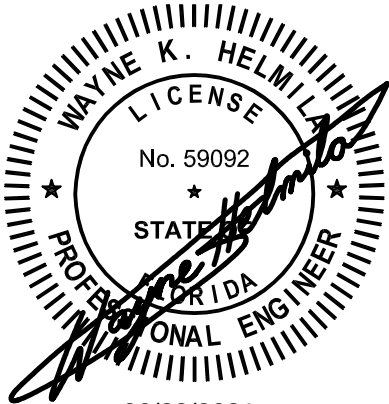
www.rice-inc.com

Florida Firm No: F-01000005061

Certificate of Authorization: #9090

Wayne K. Helmila

Registration No: 59092

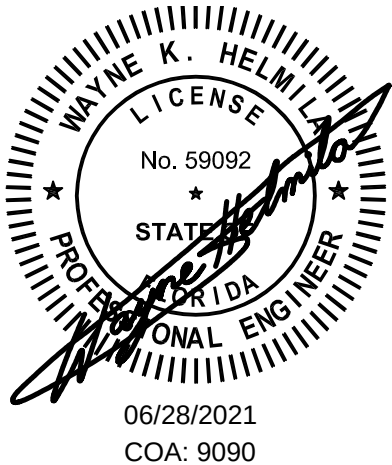
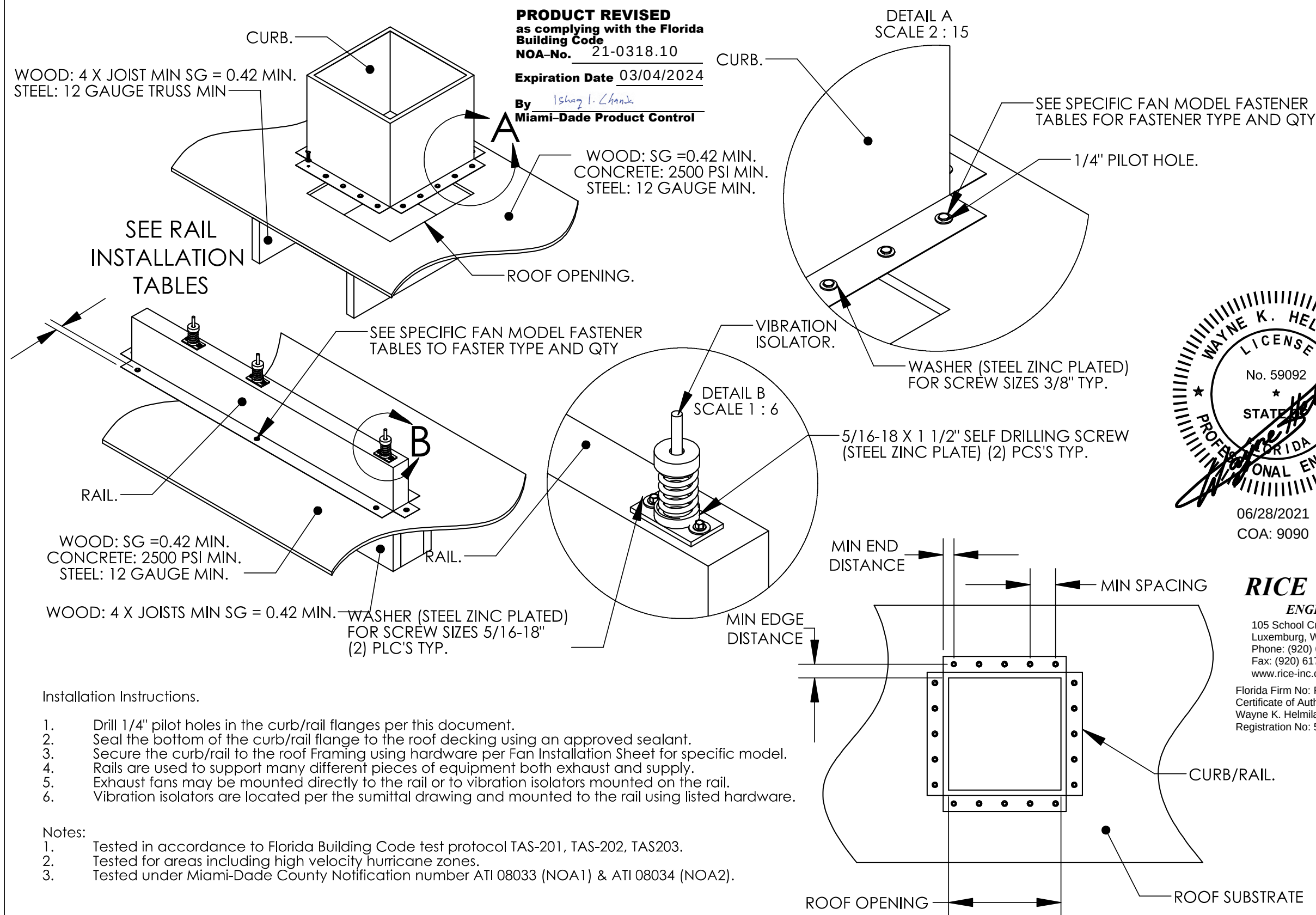


06/28/2021

COA: 9090

Miami-Dade County - Curb / Rail Installation Guide

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

ALTERNATE BRANDS

PRODUCT REVISED  
as complying with the Florida  
Building Code  
NOA-No. 21-0318.10  
Expiration Date 03/04/2024  
By Ismael L. Chanda  
Miami-Dade Product Control

CaptiveAire, Inc. commercial kitchen ventilation  
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| STEEL UTILITY SETS |                | A-SERIES STEEL SUPPLY FANS |     |                |     |
|--------------------|----------------|----------------------------|-----|----------------|-----|
| CAS FAN MODEL      | RUPP FAN MODEL | CAS FAN MODEL              |     | RUPP FAN MODEL |     |
| HRE13              | RA-VE13        | MODULAR                    | 1   | MODULAR        | 1   |
| HRE16              | RA-VE16        |                            | 2   |                | 2   |
| HRE20              | RA-VE20        |                            | 3   |                | 3   |
| HRE24              | RA-VE24        |                            | 4   |                | 4   |
| RE13BD             | RA-RE1300BD    |                            | 5   |                | 5   |
| RE13DD             | RA-RE1300DD    | DIRECT FIRED               | 1.D | DIRECT FIRED   | 1.D |
| RE15BD             | RA-RE1500BD    |                            | 2.D |                | 2.D |
| RE15DD             | RA-RE1500DD    |                            | 3.D |                | 3.D |
| RE18BD             | RA-RE1800BD    |                            | 4.D |                | 4.D |
| RE18DD             | RA-RE1800DD    |                            | 5.D |                | 5.D |
| RE20BD             | RA-RE2000BD    | ELECTRIC                   | 1.E | ELECTRIC       | 1.E |
| RE20DD             | RA-RE2000DD    |                            | 2.E |                | 2.E |
| RE24BD             | RA-RE3400BD    |                            | 3.E |                | 3.E |
| RE24DD             | RA-RE2400DD    |                            | 4.E |                | 4.E |
| BI10               | BI10RARM       |                            | 5.E |                | 5.E |
| BI12               | BI12RARM       | INDIRECT                   | 1.I | INDIRECT       | 1.I |
| BI13               | BI13RARM       |                            | 2.I |                | 2.I |
| BI15               | BI15RARM       |                            | 3.I |                | 3.I |
| BI16               | BI16RARM       | STANDARD                   | 1   | STANDARD       | 1   |
| BI18               | BI18RARM       |                            | 2   |                | 2   |
| BI20               | BI20RARM       | N/A                        |     |                |     |
| BI22               | BI22RARM       | N/A                        |     |                |     |
| BI24               | BI24RARM       | N/A                        |     |                |     |
| BI27               | BI27RARM       | N/A                        |     |                |     |
| BI30               | BI30RARM       | N/A                        |     |                |     |
| BI33               | BI33RARM       | N/A                        |     |                |     |
| BI36               | BI36RARM       | N/A                        |     |                |     |
| CB10               | CB10RARM       | N/A                        |     |                |     |
| CB12               | CB12RARM       | N/A                        |     |                |     |
| CB15               | CB15RARM       | N/A                        |     |                |     |
| CB18               | CB18RARM       | N/A                        |     |                |     |
| CB20               | CB20RARM       | N/A                        |     |                |     |
| CB22               | CB22RARM       | N/A                        |     |                |     |
| CB24               | CB24RARM       | N/A                        |     |                |     |
| CB27               | CB27RARM       | N/A                        |     |                |     |
| CB30               | CB30RARM       | N/A                        |     |                |     |
| CB36               | CB36RARM       | N/A                        |     |                |     |
| USI100             | USI100RA       | N/A                        |     |                |     |
| USI137             | USI137RA       | N/A                        |     |                |     |
| USI161             | USI161RA       | N/A                        |     |                |     |
| USI200             | USI200RA       | N/A                        |     |                |     |
| USI245             | USI245RA       | N/A                        |     |                |     |
| USI270             | USI270RA       | N/A                        |     |                |     |
| USI300             | USI300RA       | N/A                        |     |                |     |
| USI330             | USI330RA       | N/A                        |     |                |     |
| USI365             | USI365RA       | N/A                        |     |                |     |
| USBI11             | RABI11-RM      | N/A                        |     |                |     |
| USBI13             | RABI13-RM      | N/A                        |     |                |     |
| USBI15             | RABI15-RM      | N/A                        |     |                |     |
| USBI18             | RABI18-RM      | N/A                        |     |                |     |
| USBI20             | RABI20-RM      | N/A                        |     |                |     |
| USBI24             | RABI24-RM      | N/A                        |     |                |     |
| USBI30             | RABI30-RM      | N/A                        |     |                |     |
| USBI36             | RABI36-RM      | N/A                        |     |                |     |

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Wayne K. Helmila  
Registration No: 59092

06/28/2021  
COA: 9090

|                 |                                |                                                                                                                                                             |
|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material: N/A   | Part Number: N/A               | Unless Otherwise Specified<br>Dimensions are in Inches.<br><br>Standard Tolerances are:<br>Fractions: ±1/16<br>Decimal: .XX±.05<br>.XXX±.015<br>Angles: ±1° |
| Blank Size: N/A | MACOLA Number: N/A             |                                                                                                                                                             |
| Weight: N/A     | Drawing Name: ALTERNATE BRANDS |                                                                                                                                                             |
|                 | Drawn By: JJH                  |                                                                                                                                                             |
|                 | Drawing Number: NOA2-22        |                                                                                                                                                             |
|                 | Sheet: 22 of 22                |                                                                                                                                                             |

