



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

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

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series EMUA/GV, GVS and 103CAPASYB-2R Steel and Aluminum Gravity Vents

APPROVAL DOCUMENT: Drawing No. **GRAVITY Rev 2**, titled "Gravity Vents", sheets 1 through 12 of 12, dated 07/17/2015, with revision 2 dated 03/26/2019, prepared by CaptiveAire Systems, Inc., signed and sealed by Wayne K. Helmila, P.E. on 06/28/2021, bearing the Miami-Dade County Product Control renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, 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.

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

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

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

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

This NOA **renews NOA # 21-0318.07** and consists of this page 1 and evidence pages E-1, E-2, E-3, E-4, E-5 and E-6, as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



NOA No. 21-1007.01
Expiration Date: November 3, 2026
Approval Date: November 4, 2021
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous NOA's

A. DRAWINGS “Submitted under NOA # 14-1224.11”

1. Drawing No. **GRAVITY**, titled “Gravity Vents”, sheets 1 through 11 of 11, dated 07/17/2015, prepared by CaptiveAire Systems, Inc, signed and sealed by L. David Rice, P.E. on 10/11/2016.

B. TESTS “Submitted under NOA # 14-1224.11”

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 Models EMUA/GV10 Gravity Vents, prepared by Intertek/ATI, Test Report No. **E1559.02-109-18**, dated 02/03/2016, with revision 1 dated 02/29/2016, signed and sealed by Joseph A. Reed, P.E.
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 Models GV36, prepared by Intertek/ATI, Test Report No. **E6468.01-109-18**, dated 05/11/2015, with revision 1 dated 02/18/2016, signed and sealed by Joseph A. Reed, P.E.
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 Models GVS 1113 Gravity Vents, prepared by Intertek/ATI, Test Report No. **F4045.01-109-18**, dated 02/18/2016, signed and sealed by Joseph A. Reed, P.E.
4. 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 Models GVS 36 Gravity Vents, prepared by Intertek/ATI, Test Report No. **E5134.02-109-18**, dated 02/17/2016, signed and sealed by Joseph A. Reed, P.E.
5. 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 Models 103CAPASYB08-2R Gravity Vents, prepared by Intertek/ATI, Test Report No. **E5136.02-109-18**, dated 02/17/2016, signed and sealed by Joseph A. Reed, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 21-1007.01
Expiration Date: November 3, 2026
Approval Date: November 4, 2021

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (Continued) “Submitted under NOA # 14-1224.11”

6. 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 Models 103CAPASYB16-2R Gravity Vents, prepared by Intertek/ATI, Test Report No. **E5137.02-109-18**, dated 02/17/2016, signed and sealed by Joseph A. Reed, P.E.

C. CALCULATIONS “Submitted under NOA # 14-1224.11”

1. Anchor verification calculations prepared by Rice Engineering, dated 10/11/2016, signed and sealed by L. David Rice, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS “Submitted under NOA # 14-1224.11”

1. Statement letter of code conformance to the 5th edition (2014) FBC issued by Rice Engineering, dated 10/11/2016, signed and sealed by L. David Rice, P.E.
2. Statement letters of no financial interest issued by Rice Engineering, dated 10/11/2016, signed and sealed by L. David Rice, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 21-1007.01
Expiration Date: November 3, 2026
Approval Date: November 4, 2021

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. Evidence submitted under NOA # 18-0118.10

A. DRAWINGS

1. Drawing No. **GRAVITY**, titled "Gravity Vents", sheets 1 through 11 of 11, dated 07/17/2015, with revision **1** dated 11/27/2017, prepared by CaptiveAire Systems, Inc, signed and sealed by Wayne K. Helmila, P.E. on 12/13/2017.

B. TESTS

1. None.

C. CALCULATIONS

1. Anchor verification calculations prepared by Rice Engineering, dated 12/13/2017, 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 **FBC 6th Edition (2017)**, dated December 12, 2017, issued by Rice Engineering, signed and sealed by Wayne K. Helmila, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 21-1007.01
Expiration Date: November 3, 2026
Approval Date: November 4, 2021

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. Evidence submitted under NOA # 19-0717.05

A. DRAWINGS

1. Drawing No. **GRAVITY**, titled "Gravity Vents", sheets 1 through 12 of 12, dated 07/17/2015, with revision 2 dated 03/26/2019, prepared by CaptiveAire Systems, Inc., signed and sealed by Wayne K. Helmila, P.E. on 06/06/2019.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. None.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 21-1007.01
Expiration Date: November 3, 2026
Approval Date: November 4, 2021

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. Evidence submitted under NOA # 21-0318.07

A. DRAWINGS

1. Drawing No. **GRAVITY Rev 2**, titled “Gravity Vents”, sheets 1 through 12 of 12, dated 07/17/2015 and last revised on MAR 10, 2021, prepared by CaptiveAire Systems, Inc., signed and sealed by Wayne K. Helmila, P.E.
Note: This revision is for FBC 2020 (7th Edition) update only.

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 7th 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 # 19-0717.05** for FBC 2020 update, expiring 11/03/21.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 21-1007.01
Expiration Date: November 3, 2026
Approval Date: November 4, 2021

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

5. New evidence submitted

A. DRAWINGS

1. None.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance to the 7th Edition (2020) of the FBC, issued by Rice Engineering, dated 09/09/2021, signed and sealed by Wayne K. Helmila, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 21-1007.01
Expiration Date: November 3, 2026
Approval Date: November 4, 2021

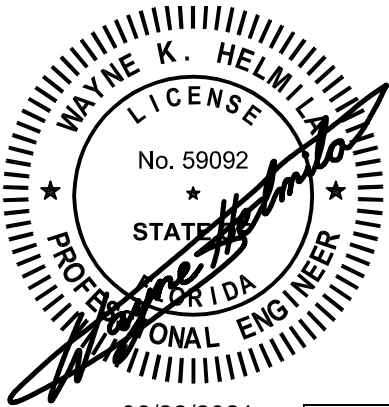
Dimensional Data - Gravity Vents

General Notes:

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

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.07
Expiration Date 11/03/2021

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01
Expiration Date 11/03/2026
By [Signature]
Miami-Dade Product Control



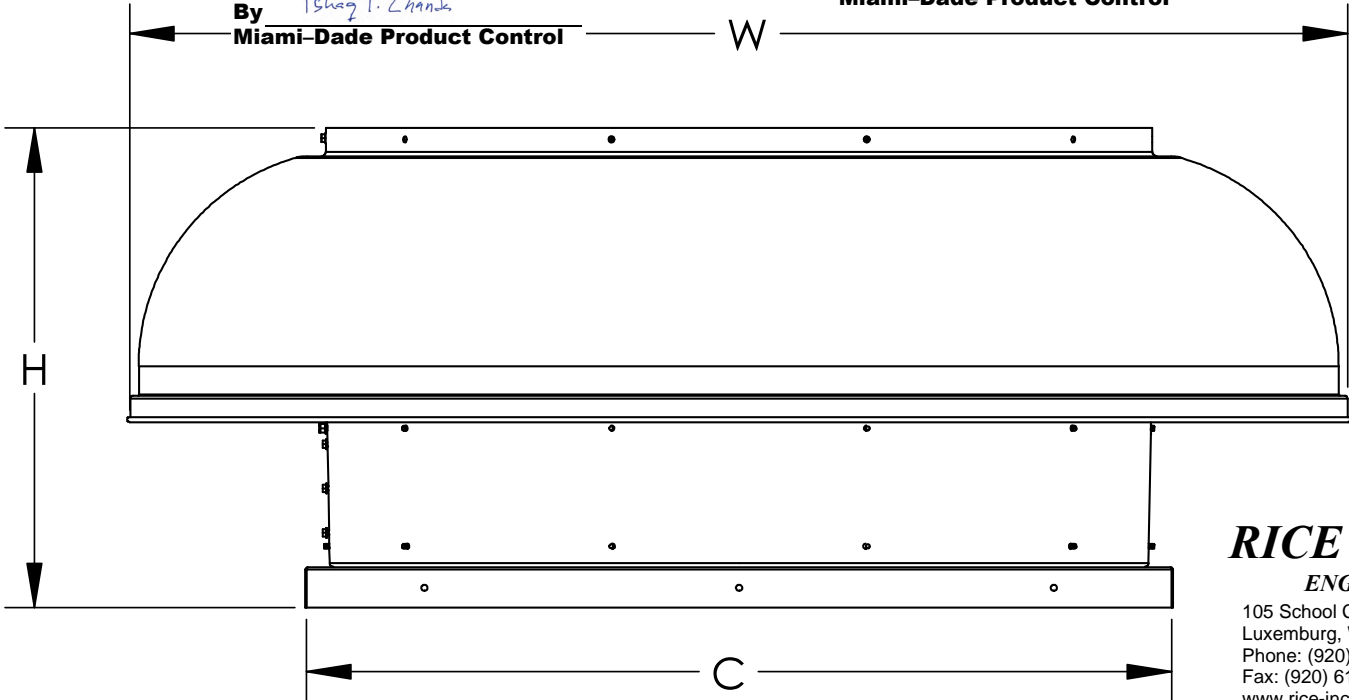
06/28/2021
COA: 9090

Revision History				
#	Description	Revised by	ECN#	Date
0	Open Gravity Vent NOA	J Hess	2740	7/17/15
1	FBC 2017 /Cracked Concrete Calcs	J Hess	2997	11/27/17
2	Added Alternate Brands to Drawings	JJH	3061	3/26/19

RICE
ENGINEERING

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

Notes:
•Steel structure assumed to be Fy = 50 ksi, 12 ga thickness minimum.
•Reference testing reports for unit design. RICE Engineering Inc. is responsible for anchoring of units to structure.
•All non-stainless steel fasteners/anchors must be sealed with Prosoco Liquid Flashing if exposed to exterior conditions.



Gravity Vent MODEL	HT (in)	W (in)	C (in)	WEIGHT (lbs)
EMUA10	9 3/4	18 5/16	19	28
EMUA12	10 1/4	20 5/16	19	30
EMUA14	12 5/8	27 5/16	21	33
EMUA18	14 3/8	33 9/16	26	43
GV10	9 3/4	18 5/16	19	28
GV12	10 1/4	20 5/16	19	30
GV14	12 5/8	27 5/16	21	33
GV18	14 3/8	33 9/16	26	43
GV20	15 1/8	38 15/16	28	62
GV24	16 3/4	43 7/16	33	74
GV30	18 7/8	52 13/16	40	157
GV36	22 3/8	63 5/16	44	162
GVS1113	15 3/8	23 1/4	21	9 1/2
GVS15	15 3/8	27	24 3/4	13
GVS1820	15 3/8	30 1/4	28	14
GVS24	15 3/8	35 1/4	33	15
GVS30	15 3/8	42 1/4	40	17
GVS36	15 3/8	46 1/4	44	23
103CAPASYB08-2R	14	18 1/4	19	8 1/2
103CAPASYB10-2R	14	18 1/4	19	8 1/2
103CAPASYB12-2R	14	20 1/4	19	9
103CAPASYB14-2R	14	22 1/4	21	9 1/2
103CAPASYB16-2R	14	26 1/4	26	13

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

SEE PAGE 12 FOR ALTERNATE BRANDS

Models EMUA/ GV, 103CAPASYB-2R

DESIGN PRESSURE: +150.0 / -150.0 PSF

LARGE MISSILE IMPACT RESISTANT

Models GVS

DESIGN PRESSURE: +100.0 / -100.0 PSF

LARGE MISSILE IMPACT RESISTANT

- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 15086, 15028, 15084, 15085, 15082, 15083.

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

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: Gravity Vent	
	Drawn By: N Perry	
	Drawing Number: GRAVITY 01	
	Sheet: 1 of 12	



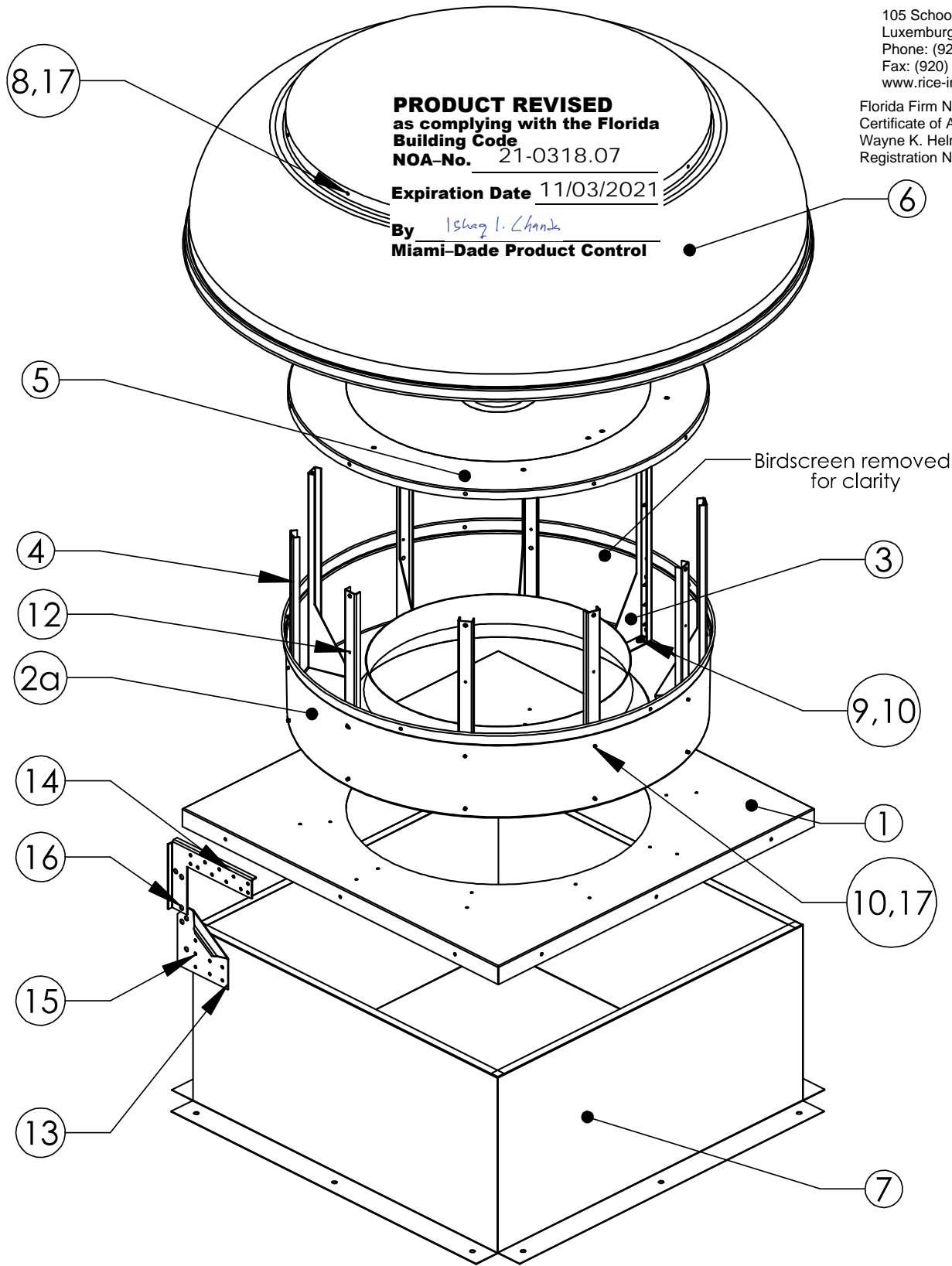
Dimensional Data - GV/EMUA Series

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

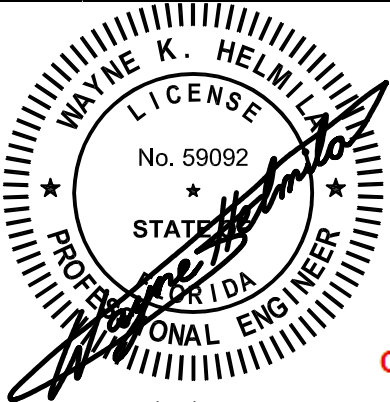
Revision History				
#	Description	Revised by	ECN#	Date
0	Open Gravity Vent NOA	J Hess	2740	7/27/15
1	FBC 2017 /Cracked Concrete Calcs	J Hess	2997	11/27/17
2	Added Alternate Brands to Drawings	JJH	3061	3/26/19
3	Changed 16GA Curb to 18GA Galv.	JJH	--	3/8/21



Item Number	Description of Part	Material
1a	Base (sizes 10-14)	20 Ga. Galvanized G90
1b	Base (sizes 18-24)	18 Ga. Galvanized G90
1c	Base (sizes 30-36)	16 Ga. Galvanized G90
2a	Baffle / Wrapper	.080 Aluminum 1100-0
2b	Airshaft (EMUA/GV10 not shown)	18 Ga. Galvanized G90
3	Gusset (size 36 only)	12 Ga. Galvanized G90
4a	Vertical Support (sizes 10-14)	14 Ga. Galvanized G90
4b	Vertical Support (sizes 18-24)	14 Ga. Galvanized G90
4c	Vertical Support (sizes 30-36)	12 Ga. Galvanized G90
5	Top Plate	16 Ga. Galvanized G90
6	Vent Hood	.090 Aluminum 1100-0
7	Curb (Up to 20" Height)	20 Ga. Aluminized / Galv. Steel
7	Curb (20+" to 42" Height)	18 Ga. Aluminized / Galv. Steel
8	#8 x 1/2 Self Tapping Screws (Not Shown)	Zinc Coated Steel
9	1/4" - 20 X 1" Whiz Bolt	Zinc Coated Steel
10	1/4" - 20Whiz Nut	Zinc Coated Steel
11	1/4" - 20 Acorn Nuts (Not Shown)	Zinc Coated Steel
12	1/4" X 1-1/2" Self Tap Screw / Nylon Washer	Zinc Coated Steel / Nylon
13	Curb Plate Left / Right (Hinge Kit)	10 Ga. Galvanized G90
14	Fan Plate Left / Right (Hinge Kit)	10 Ga. Galvanized G90
15	1/4" - 20 x 3/4" hex head bolts	Zinc Coated Steel
16	3/8" - 16 x 1-1/2" bolt	Zinc Coated Steel
17	1/4" - 20 x 3/4" PEM studs	Zinc Coated Steel
18	3/16" Rivet	Zinc Coated Steel
19	1/4" - 20 X 1-1/8" Standoff	Zinc Coated Steel
20	1/4" Steel Washer	Zinc Coated Steel

- 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 15086, 15028, 15084, 15085, 15082, 15083.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: Gravity Vent	
	Drawn By: N Perry	
	Drawing Number: GRAVITY 02	
	Sheet: 2 of 12	



06/28/2021
COA: 9090

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01

Expiration Date 11/03/2026

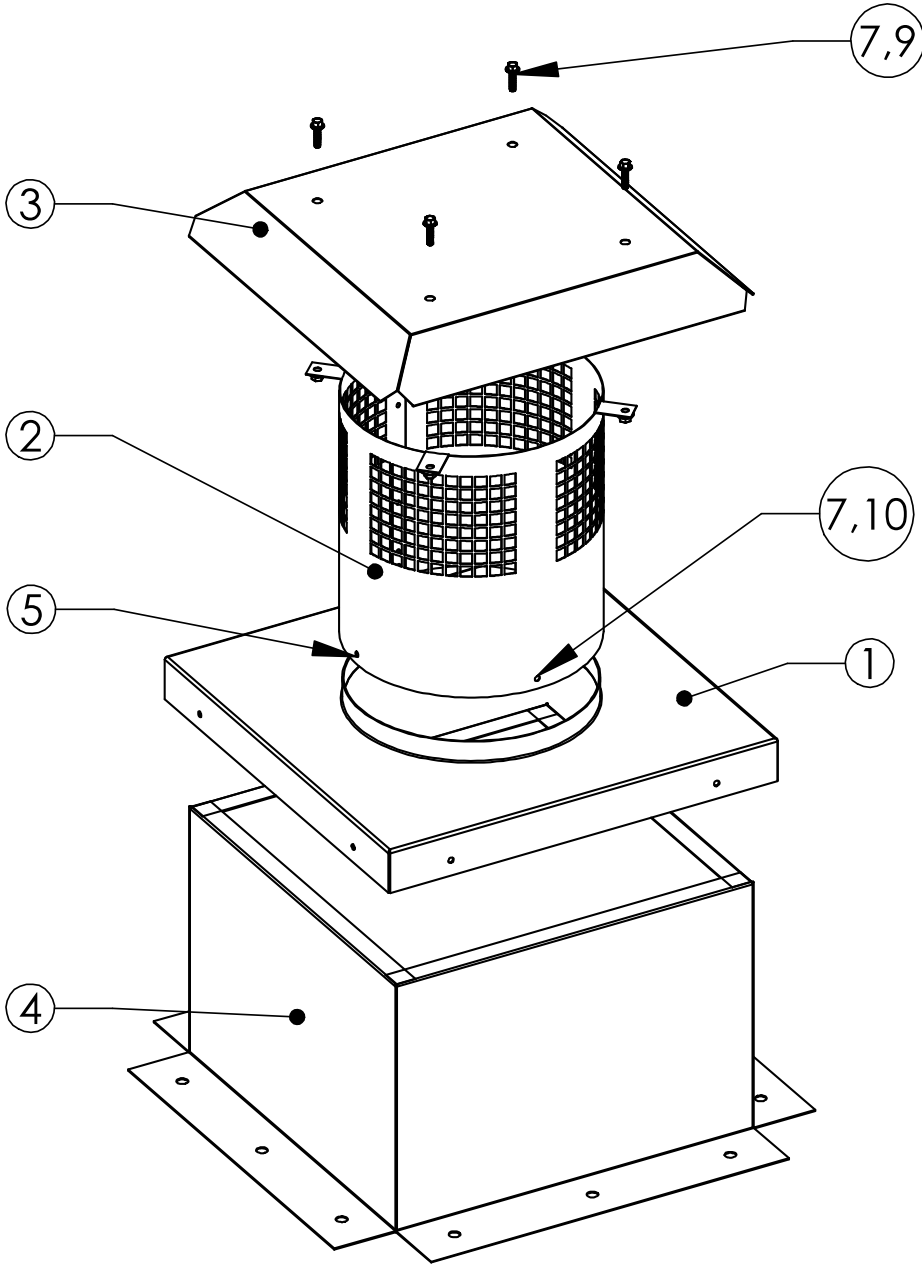
By [Signature]
Miami-Dade Product Control

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



Dimensional Data - 103CAPASYB-2R Series

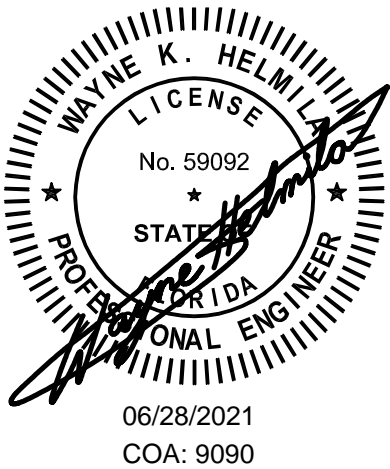
Revision History				
#	Description	Revised by	ECN#	Date
0	Open Gravity Vent NOA	J Hess	2740	7/27/15
1	FBC 2017 /Cracked Concrete Calcs	J Hess	2997	11/27/17
2	Added Alternate Brands to Drawings	JJH	3061	3/26/19
3	Changed 16GA Curb to 18GA Galv.	JJH	--	3/8/21



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.07
Expiration Date 11/03/2021
By Ishag I. Chande
Miami-Dade Product Control

Item Number	Description Of Part	Material
1	Base	20 Ga. 430 SS
2	Baffle / Wrapper	20 Ga. 430 SS
3	Steel Vent Hood	20 Ga. 430 SS
4	Curb (Up to 20" Height)	20 Ga. Aluminized / Galv. Steel
4	Curb (20+" to 42" Height)	18 Ga. Aluminized / Galv. Steel
5	3/16" Rivet	Zinc Coated Steel
6	Silco 400 Deg. Sealant (Not Shown)	Silver Silicone
7	1/4"-20 X 1" Whiz Bolt	Zinc Coated Steel
8	1/4"-20 Rivsert	Zinc Coated Steel
9	1/4" Washer	Zinc Coated Steel
10	1/4" Whiz Nut	Zinc Coated Steel

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



PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01
Expiration Date 11/03/2026
By [Signature]
Miami-Dade Product Control

- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 15086, 15028, 15084, 15085, 15082, 15083.

Material: N/A	Part Number: See Above	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: Gravity Vent	
	Drawn By: N Perry	
	Drawing Number: GRAVITY 03	
	Sheet: 3 of 12	

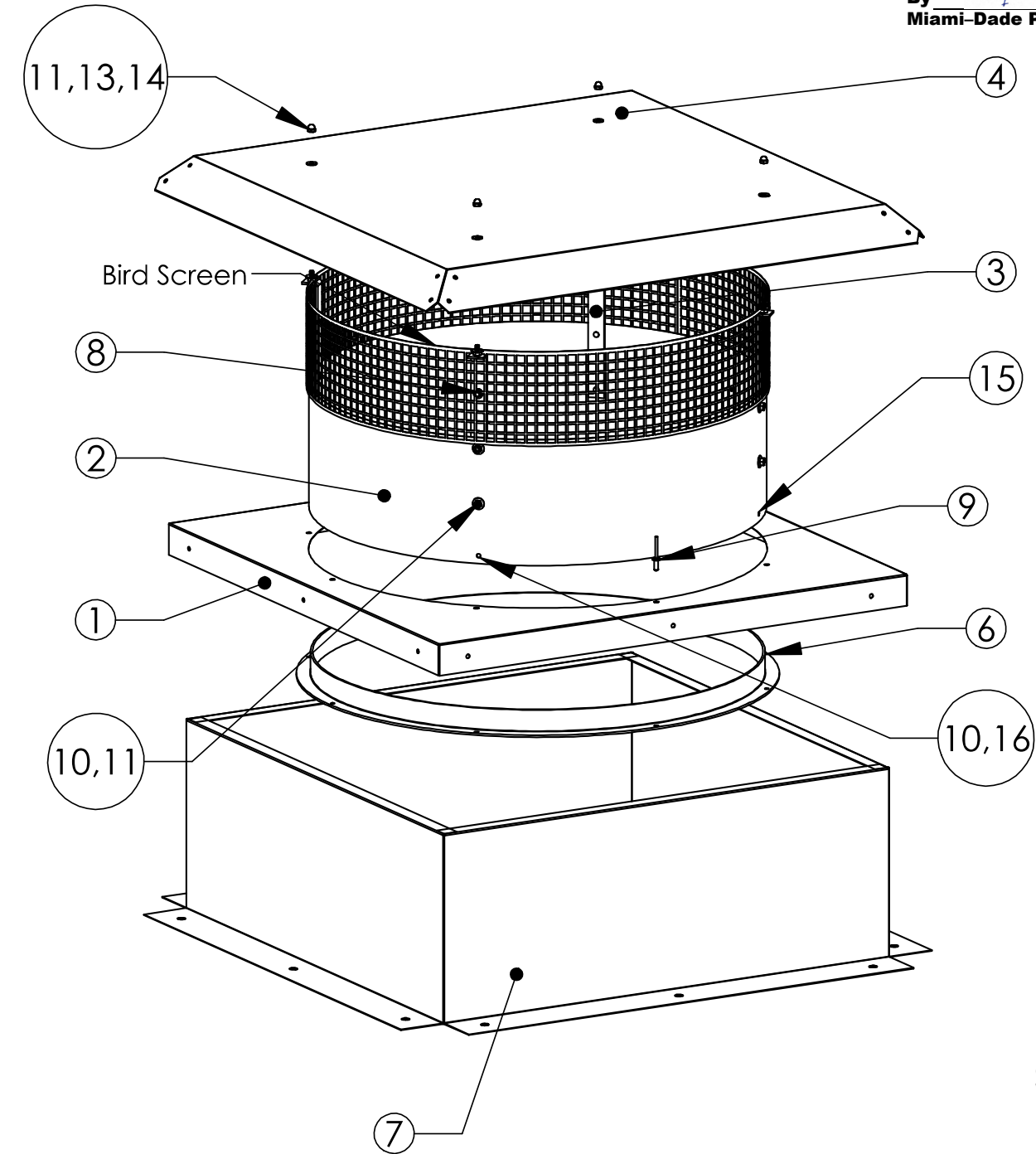
CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994



Dimensional Data - GVS Series

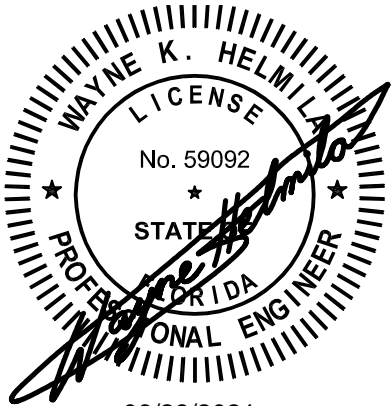
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.07
Expiration Date 11/03/2021
By Ishag I. Chande
Miami-Dade Product Control

Revision History				
#	Description	Revised by	ECN#	Date
0	Open Gravity Vent NOA	J Hess	2740	7/27/15
1	FBC 2017 /Cracked Concrete Calcs	J Hess	2997	11/27/17
2	Added Alternate Brands to Drawings	JJH	3061	3/26/19
3	Changed 16GA Curb to 18GA Galv.	JJH	--	3/8/21



Item Number	Description Of Part	Material
1	Base	20 Ga. Galvanized G90
2	Baffle / Wrapper	20 Ga. Galvanized G90
3	Vertical Support	14 Ga. Galvanized G90
4	Steel Vent Hood	20 Ga. Galvanized G90
5	Vent Hood Corner (not shown)	20 Ga. Galvanized G90
6	Ring	1/8 x 1 x 1" Alum. Angle
7	Curb (Up to 20" Height)	20 Ga. Aluminized / Galv. Steel
7	Curb (20+" to 42" Height)	18 Ga. Aluminized / Galv. Steel
8	1/4"-20 X 1-1/2" Self Tapping Hex Screw	Zinc Coated Steel
9	1/4" SSPI Rivet	Zinc Coated Steel
10	1/4"-20 Whiz Nuts	Zinc Coated Steel
11	1/4"-20 X 3/4" PEM Stud	Zinc Coated Steel
12	Silco 400 Deg. Sealant (Not Shown)	Silver Silicone
13	1/4"-20 Acorn Nut	Zinc Coated Steel
14	1/4" Washer	Zinc Coated Steel
15	3/16" Rivet	Zinc Coated Steel
16	1/4-20 X 1" Whiz bolt	Zinc Coated Steel

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



PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01
Expiration Date 11/03/2026
By [Signature]
Miami-Dade Product Control

- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 15086, 15028, 15084, 15085, 15082, 15083.

Material: N/A	Part Number: See Above	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A	Drawing Name: Gravity Vent	
	Drawn By: N Perry	
	Drawing Number: GRAVITY 04	
	Sheet: 4 of 12	

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

CAPTIVEAIRE
THE PERFORMANCE COMPANY

Dimensional Data - Gravity Vents

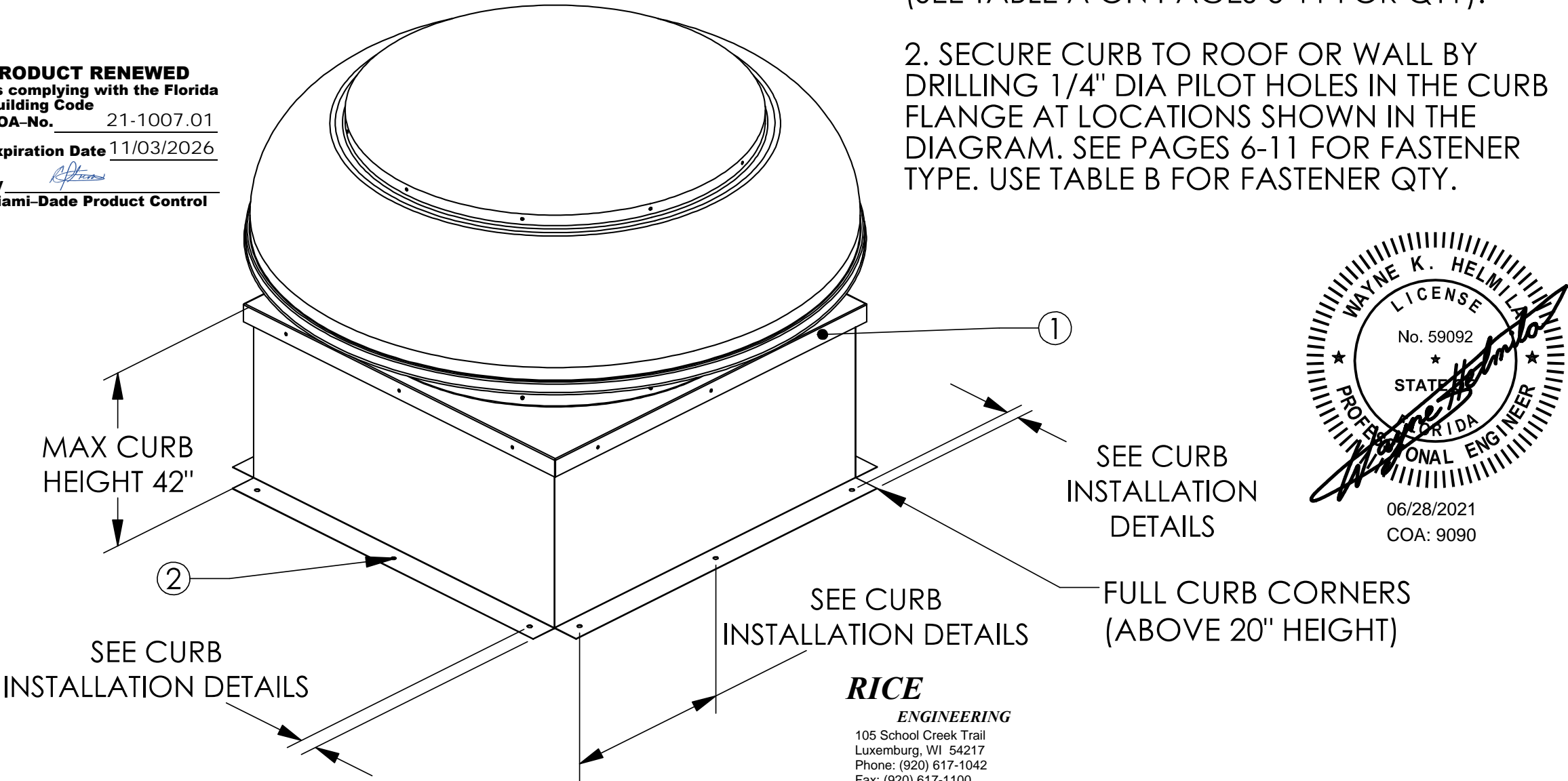
Revision History				
#	Description	Revised by	ECN#	Date
0	Open Gravity Vent NOA	J Hess	2740	7/27/15
1	FBC 2017 /Cracked Concrete Calcs	J Hess	2997	11/27/17
2	Added Alternate Brands to Drawings	JJH	3061	3/26/19
3	Changes to Full Curb Corners	JJH	--	3/8/21

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.07
Expiration Date 11/03/2021
By Ishag I. Chande
Miami-Dade Product Control

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 TABLE A ON PAGES 6-11 FOR QTY).

2. SECURE CURB TO ROOF OR WALL BY DRILLING 1/4" DIA PILOT HOLES IN THE CURB FLANGE AT LOCATIONS SHOWN IN THE DIAGRAM. SEE PAGES 6-11 FOR FASTENER TYPE. USE TABLE B FOR FASTENER QTY.

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01
Expiration Date 11/03/2026
By [Signature]
Miami-Dade Product Control

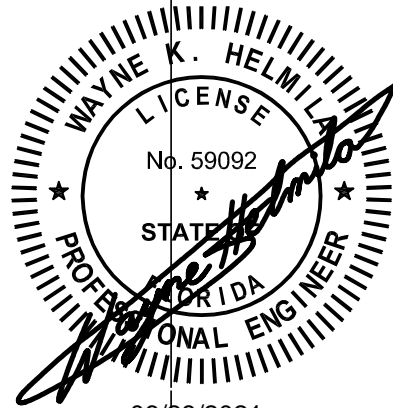


- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 15086, 15028, 15084, 15085, 15082, 15083.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: Gravity Vent	
	Drawn By: N Perry	
	Drawing Number: GRAVITY 05	
	Sheet: 5 of 12	

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

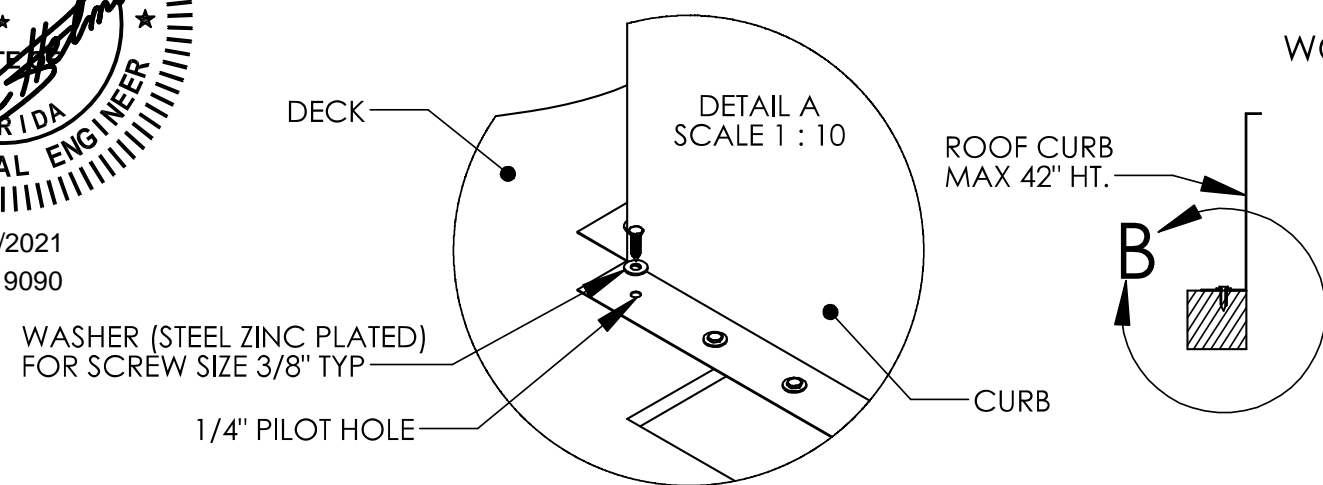




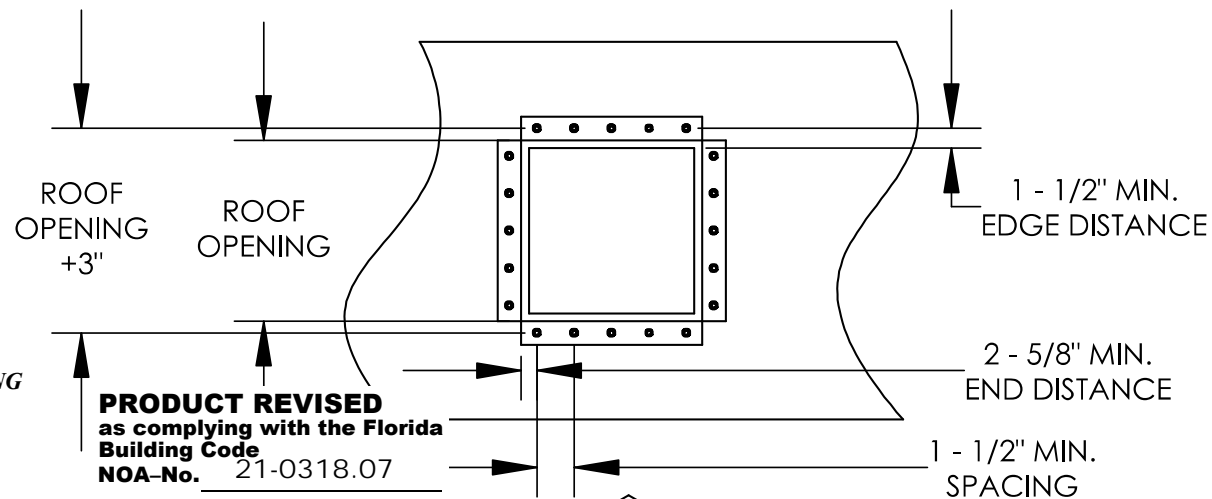
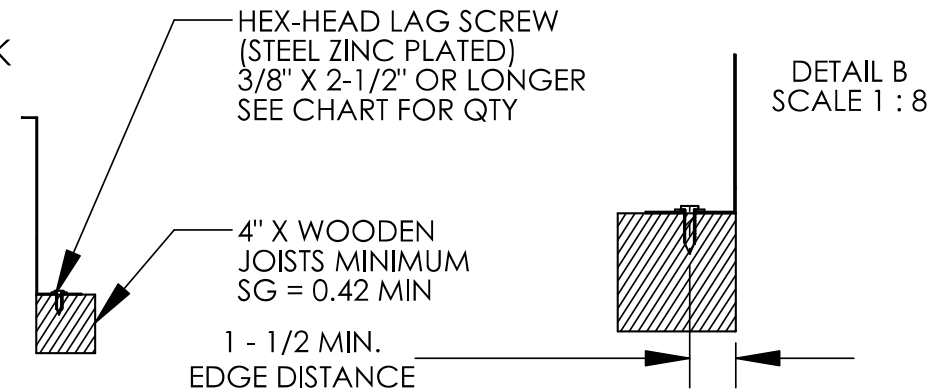
06/28/2021
COA: 9090

Miami-Dade County - Roof Curb Installation Guide For Wood Substrate

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



WOODEN DECK



RICE
ENGINEERING

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

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.07

Expiration Date 11/03/2021

By Isahag I. Chandra
Miami-Dade Product Control

WOODEN ROOF MEMBERS.
4" X JOISTS MINIMUM.
BY OTHERS

ROOF OPENING.

1/2" WOODEN ROOF DECKING.
MINIMUM.

CURB
20" HIGH & LESS = 20 Ga. STEEL
20+" to 42" HIGH = 18 Ga. STEEL

FULL CORNERS
ABOVE 20" THRU 42".

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 15086, 15028, 15084, 15085, 15082, 15083.

TABLE A: FAN TO CURB				
Unit Size	Base Size	Curb Size	Fasteners	
			Per Side	Total
EMUA10	19"	17 - 1/2"	3	12
EMUA12	19"	17 - 1/2"	3	12
EMUA14	21"	19 - 1/2"	3	12
EMUA18	26"	24 - 1/2"	3	12
GV10	19"	17 - 1/2"	3	12
GV12	19"	17 - 1/2"	3	12
GV14	21"	19 - 1/2"	3	12
GV18	26"	24 - 1/2"	3	12
GV20	28"	26 - 1/2"	3	12
GV24	33"	31 - 1/2"	3	12
GV30	40"	38 - 1/2"	3	12
GV36	44"	42 - 1/2"	3	12
GVS1113	21"	19 - 1/2"	3	12
GVS15	24 - 1/2"	23"	3	12
GVS1820	28"	26 - 1/2"	3	12
GVS24	33"	31 - 1/2"	3	12
GVS30	40"	38 - 1/2"	3	12
GVS36	44"	42 - 1/2"	3	12
103CAPASYB08-2R	19"	17 - 1/2"	3	12
103CAPASYB10-2R	19"	17 - 1/2"	3	12
103CAPASYB12-2R	19"	17 - 1/2"	3	12
103CAPASYB14-2R	21"	19 - 1/2"	3	12
103CAPASYB16-2R	26"	24 - 1/2"	3	12

TABLE B: CURB TO DECK		
WOOD		
Per Side	Total	
3	12	
3	12	
3	12	
4	16	
3	12	
3	12	
3	12	
4	16	
4	16	
4	16	
5	20	
6	24	
3	12	
3	12	
3	12	
3	12	
3	12	
3	12	
3	12	
3	12	

SEE PAGE 12 FOR ALTERNATE BRANDS

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01

Expiration Date 11/03/2026

By [Signature]
Miami-Dade Product Control

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

Part Number: N/A
MACOLA Number: N/A
Drawing Name: Gravity Vent
Drawn By: N Perry
Drawing Number: GRAVITY 06
Sheet: 6 of 12

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
P 800.334.925 | F 919.227.5994

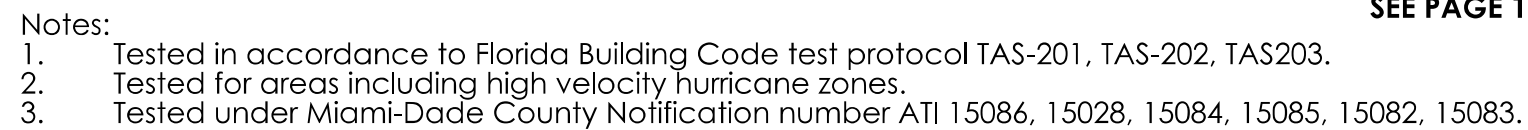


TABLE A: FAN TO CURB					TABLE B: CURB TO DECK	
Unit Size	Base Size	Curb Size	Fasteners		CONCRETE	
			Per Side	Total	Per Side	Total
EMUA10	19"	17 - 1/2"	3	12	3	12
EMUA12	19"	17 - 1/2"	3	12	3	12
EMUA14	21"	19 - 1/2"	3	12	3	12
EMUA18	26"	24 - 1/2"	3	12	3	12
GV10	19"	17 - 1/2"	3	12	3	12
GV12	19"	17 - 1/2"	3	12	3	12
GV14	21"	19 - 1/2"	3	12	3	12
GV18	26"	24 - 1/2"	3	12	3	12
GV20	28"	26 - 1/2"	3	12	4	16
GV24	33"	31 - 1/2"	3	12	4	16
GV30	40"	38 - 1/2"	3	12	4	16
GV36	44"	42 - 1/2"	3	12	5	20
GVS1113	21"	19 - 1/2"	3	12	3	12
GVS15	24 - 1/2"	23"	3	12	3	12
GVS1820	28"	26 - 1/2"	3	12	3	12
GVS24	33"	31 - 1/2"	3	12	3	12
GVS30	40"	38 - 1/2"	3	12	3	12
GVS36	44"	42 - 1/2"	3	12	3	12
103CAPASYB08-2R	19"	17 - 1/2"	3	12	3	12
103CAPASYB10-2R	19"	17 - 1/2"	3	12	3	12
103CAPASYB12-2R	19"	17 - 1/2"	3	12	3	12
103CAPASYB14-2R	21"	19 - 1/2"	3	12	3	12
103CAPASYB16-2R	26"	24 - 1/2"	3	12	3	12

SEE PAGE 12 FOR ALTERNATE BRANDS

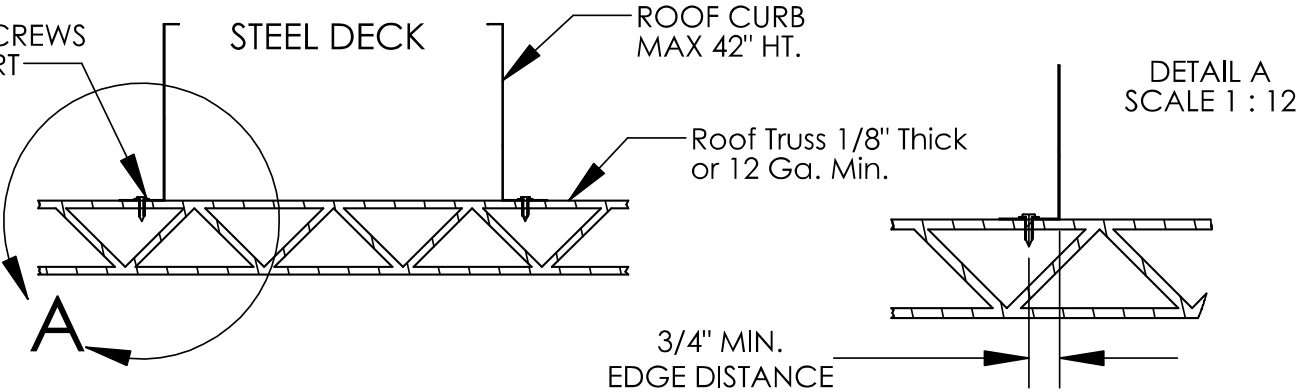
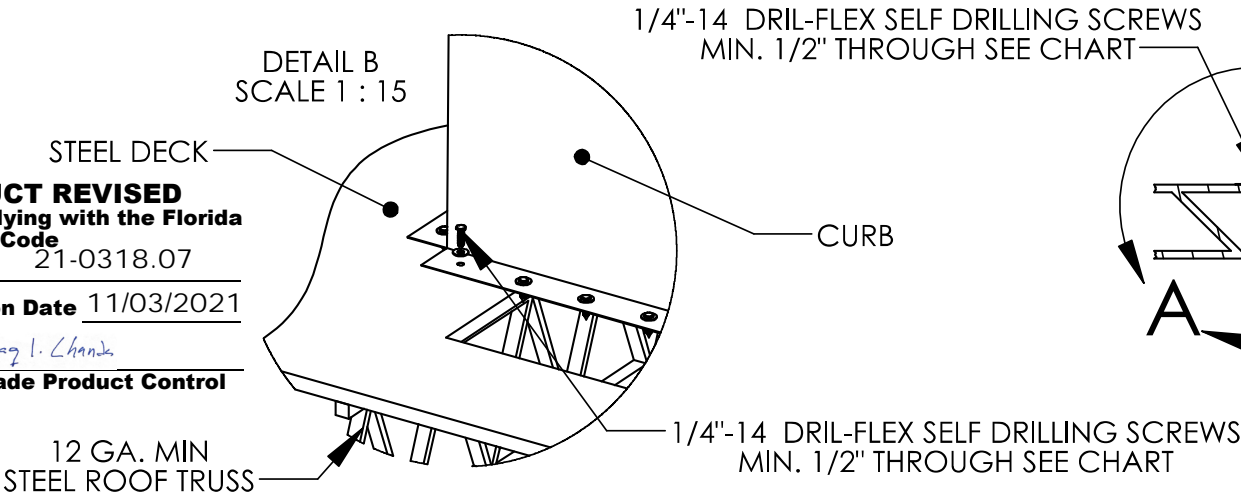
Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: Gravity Vent	
	Drawn By: N Perry	
	Drawing Number: GRAVITY 07	
	Sheet: 7 of 12	

CAPTIVE AIRE
THE PERFORMANCE COMPANY

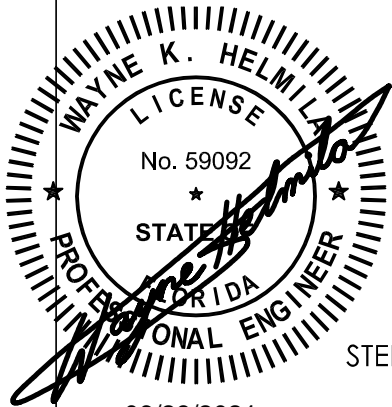
Miami-Dade County - Roof Curb
Installation Guide For Steel Substrate

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

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.07
Expiration Date 11/03/2021
By Ishag I. Chank
Miami-Dade Product Control



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

12 GA. MIN
STEEL ROOF TRUSS

- 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 15086, 15028, 15084, 15085, 15082, 15083.

Material: N/A	Part Number: N/A
Blank Size: N/A x N/A	MACOLA Number: N/A
Weight: N/A lbs	Drawing Name: Gravity Vent
	Drawn By: N Perry
	Drawing Number: GRAVITY 08
	Sheet: 8 of 12

TABLE A: FAN TO CURB				
Unit Size	Base Size	Curb Size	Fasteners	
			Per Side	Total
EMUA10	19"	17 - 1/2"	3	12
EMUA12	19"	17 - 1/2"	3	12
EMUA14	21"	19 - 1/2"	3	12
EMUA18	26"	24 - 1/2"	3	12
GV10	19"	17 - 1/2"	3	12
GV12	19"	17 - 1/2"	3	12
GV14	21"	19 - 1/2"	3	12
GV18	26"	24 - 1/2"	3	12
GV20	28"	26 - 1/2"	3	12
GV24	33"	31 - 1/2"	3	12
GV30	40"	38 - 1/2"	3	12
GV36	44"	42 - 1/2"	3	12
GVS1113	21"	19 - 1/2"	3	12
GVS15	24 - 1/2"	23"	3	12
GVS1820	28"	26 - 1/2"	3	12
GVS24	33"	31 - 1/2"	3	12
GVS30	40"	38 - 1/2"	3	12
GVS36	44"	42 - 1/2"	3	12
103CAPASYB08-2R	19"	17 - 1/2"	3	12
103CAPASYB10-2R	19"	17 - 1/2"	3	12
103CAPASYB12-2R	19"	17 - 1/2"	3	12
103CAPASYB14-2R	21"	19 - 1/2"	3	12
103CAPASYB16-2R	26"	24 - 1/2"	3	12

TABLE B: CURB TO DECK		
STEEL		
	STEEL	
	Per Side	Total
	3	12
	3	12
	3	12
	3	12
	3	12
	3	12
	3	12
	3	12
	3	12
	4	16
	4	16
	4	16
	5	20
	3	12
	3	12
	3	12
	3	12
	3	12
	3	12
	3	12
	3	12
	3	12

SEE PAGE 12 FOR ALTERNATE BRANDS

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01
Expiration Date 11/03/2026
By
Miami-Dade Product Control



Miami-Dade County - Wall Curb
Installation Guide For Wood Construction

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

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01
Expiration Date 11/03/2026
By Miami-Dade Product Control

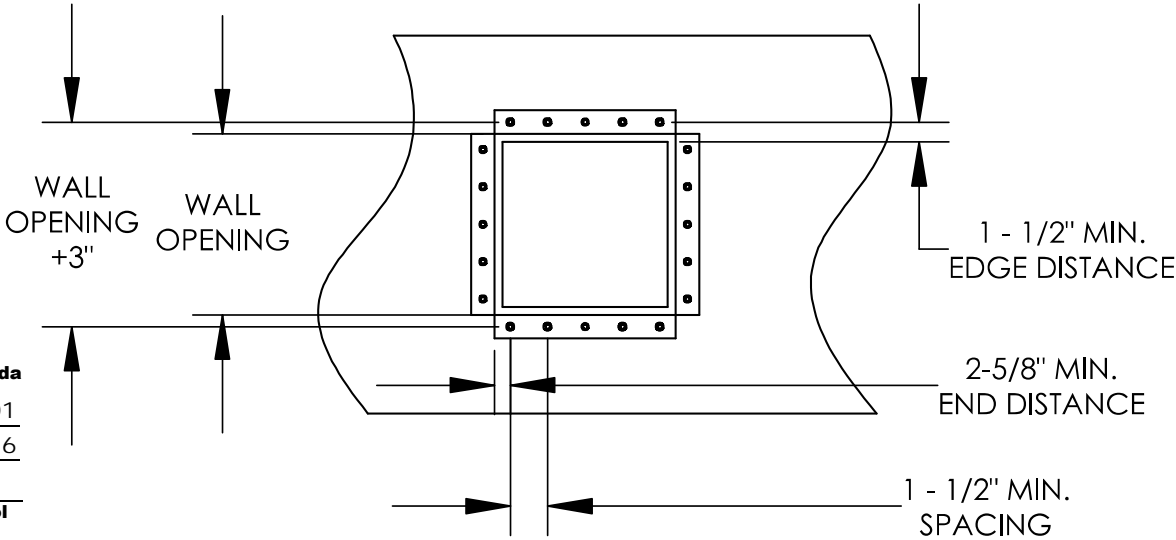
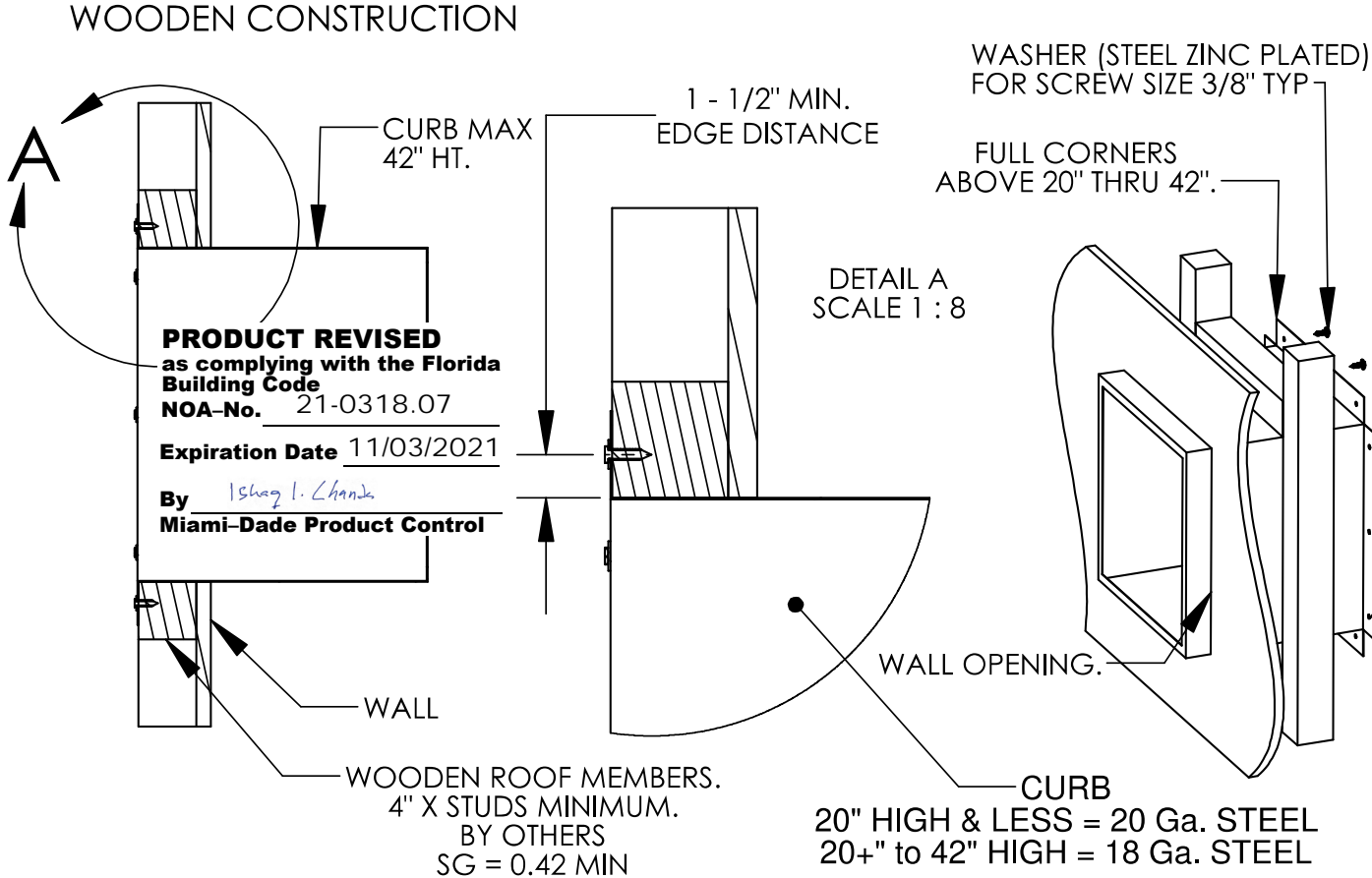


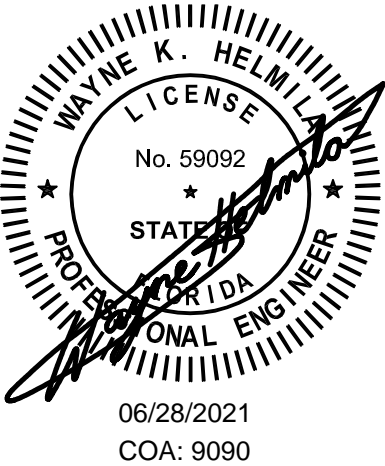
TABLE A: FAN TO CURB and TABLE B: CURB TO WALL tables with columns for Unit Size, Base Size, Curb Size, Fasteners (Per Side, Total), and WOOD (Per Side, Total).



SEE PAGE 12 FOR ALTERNATE BRANDS

1/4" PILOT HOLE
HEX-HEAD LAG SCREW
(STEEL ZINC PLATED)
3/8" X 2-1/2" OR LONGER
SEE CHART FOR QTY

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



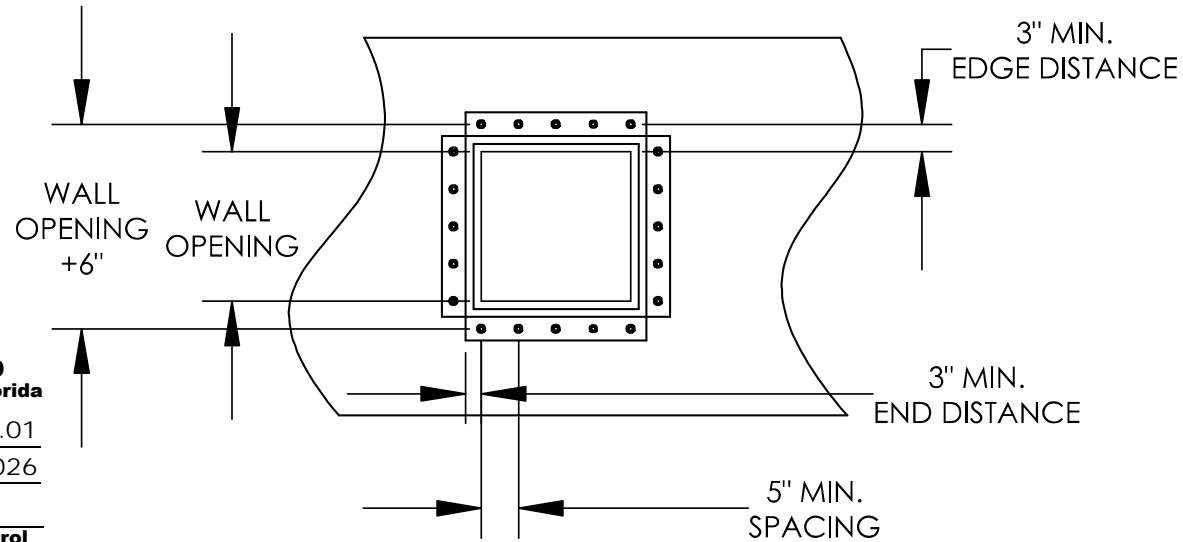
- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
2. Tested for areas including high velocity hurricane zones.
3. Tested under Miami-Dade County Notification number ATI 15086, 15028, 15084, 15085, 15082, 15083.

Table with 3 columns: Material, Part Number, and Dimensions/Tolerances. Includes details like 'Material: N/A', 'Part Number: N/A', and 'Standard Tolerances are: Fractions: ±1/16'.



Miami-Dade County - Wall Curb Installation Guide For Concrete Construction

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




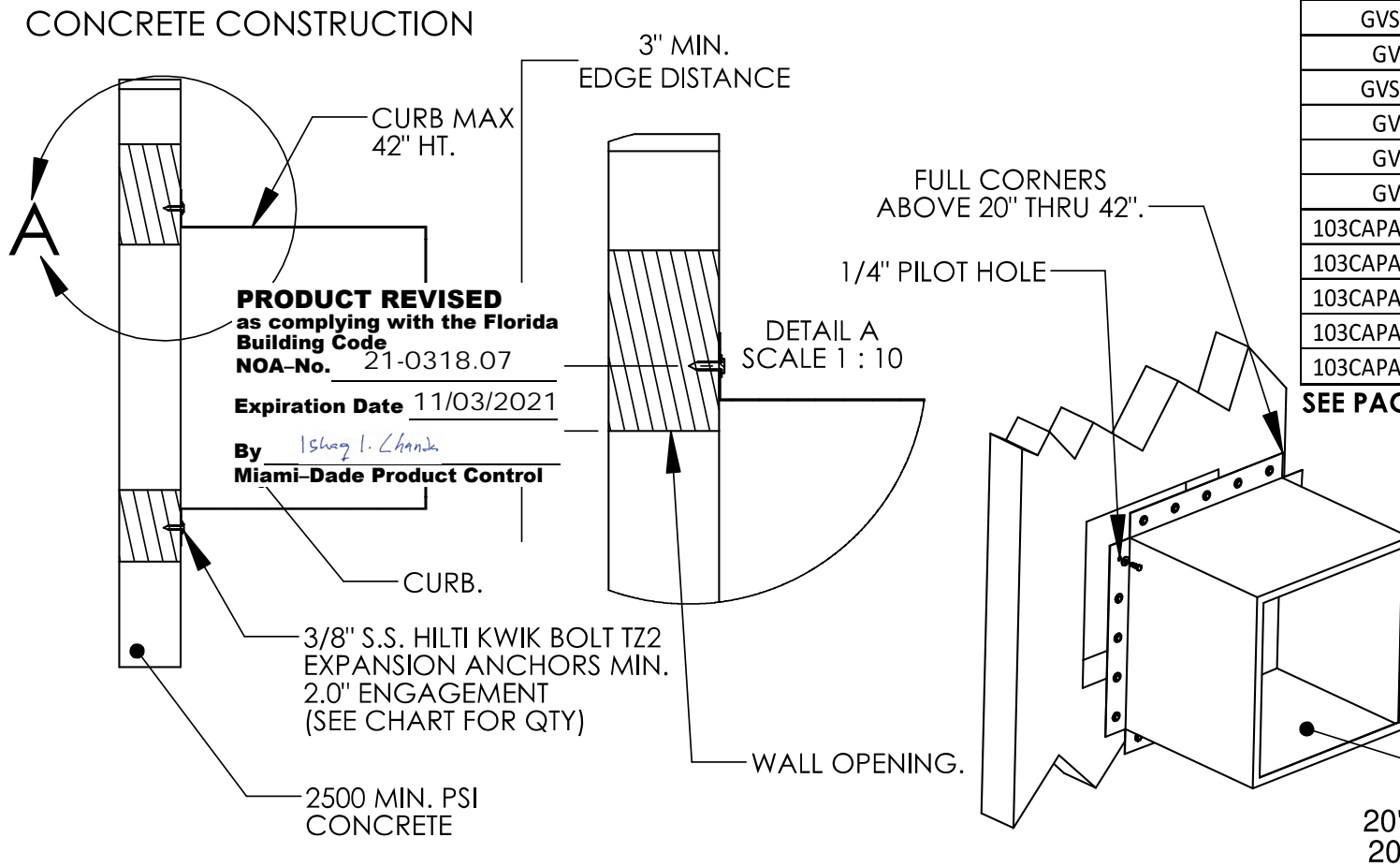
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01
Expiration Date 11/03/2026
By 
Miami-Dade Product Control

TABLE A: FAN TO CURB					TABLE B: CURB TO WALL	
Unit Size	Base Size	Curb Size	Fasteners		CONCRETE	
			Per Side	Total	Per Side	Total
EMUA10	19"	17 - 1/2"	3	12	3	12
EMUA12	19"	17 - 1/2"	3	12	3	12
EMUA14	21"	19 - 1/2"	3	12	3	12
EMUA18	26"	24 - 1/2"	3	12	4	16
GV10	19"	17 - 1/2"	3	12	3	12
GV12	19"	17 - 1/2"	3	12	3	12
GV14	21"	19 - 1/2"	3	12	3	12
GV18	26"	24 - 1/2"	3	12	4	16
GV20	28"	26 - 1/2"	3	12	4	16
GV24	33"	31 - 1/2"	3	12	4	16
GV30	40"	38 - 1/2"	N/A		N/A	
GV36	44"	42 - 1/2"	N/A		N/A	
GVS1113	21"	19 - 1/2"	3	12	3	12
GVS15	24 - 1/2"	23"	3	12	3	12
GVS1820	28"	26 - 1/2"	3	12	3	12
GVS24	33"	31 - 1/2"	3	12	3	12
GVS30	40"	38 - 1/2"	N/A		N/A	
GVS36	44"	42 - 1/2"	N/A		N/A	
103CAPASYB08-2R	19"	17 - 1/2"	3	12	3	12
103CAPASYB10-2R	19"	17 - 1/2"	3	12	3	12
103CAPASYB12-2R	19"	17 - 1/2"	3	12	3	12
103CAPASYB14-2R	21"	19 - 1/2"	3	12	3	12
103CAPASYB16-2R	26"	24 - 1/2"	3	12	3	12

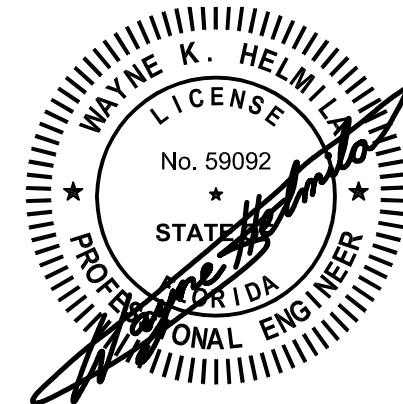
SEE PAGE 12 FOR ALTERNATE BRANDS



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-0100000506
Certificate of Authorization: #90
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 15086, 15028, 15084, 15085, 15082, 15083.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XXX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: Gravity Vent	
	Drawn By: N Perry	
	Drawing Number: GRAVITY 10	
	Sheet: 10 of 12	

Unless Otherwise Specified
Dimensions are in Inches.

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

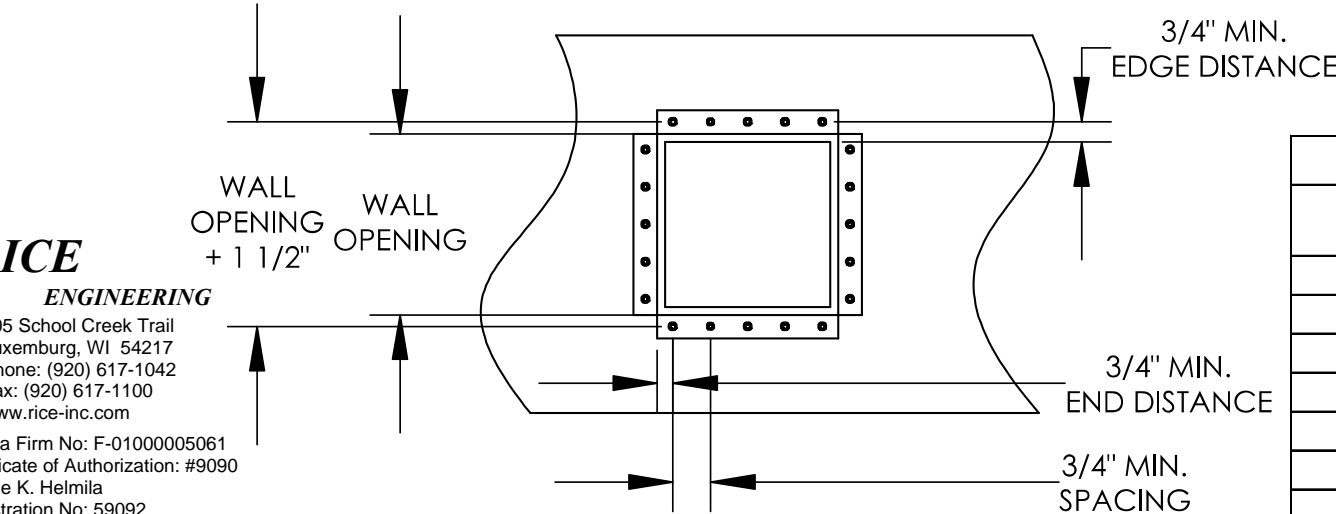
CAPTIVE AIRE
THE PERFORMANCE COMPANY

Miami-Dade County - Wall Curb
Installation Guide For Steel Construction

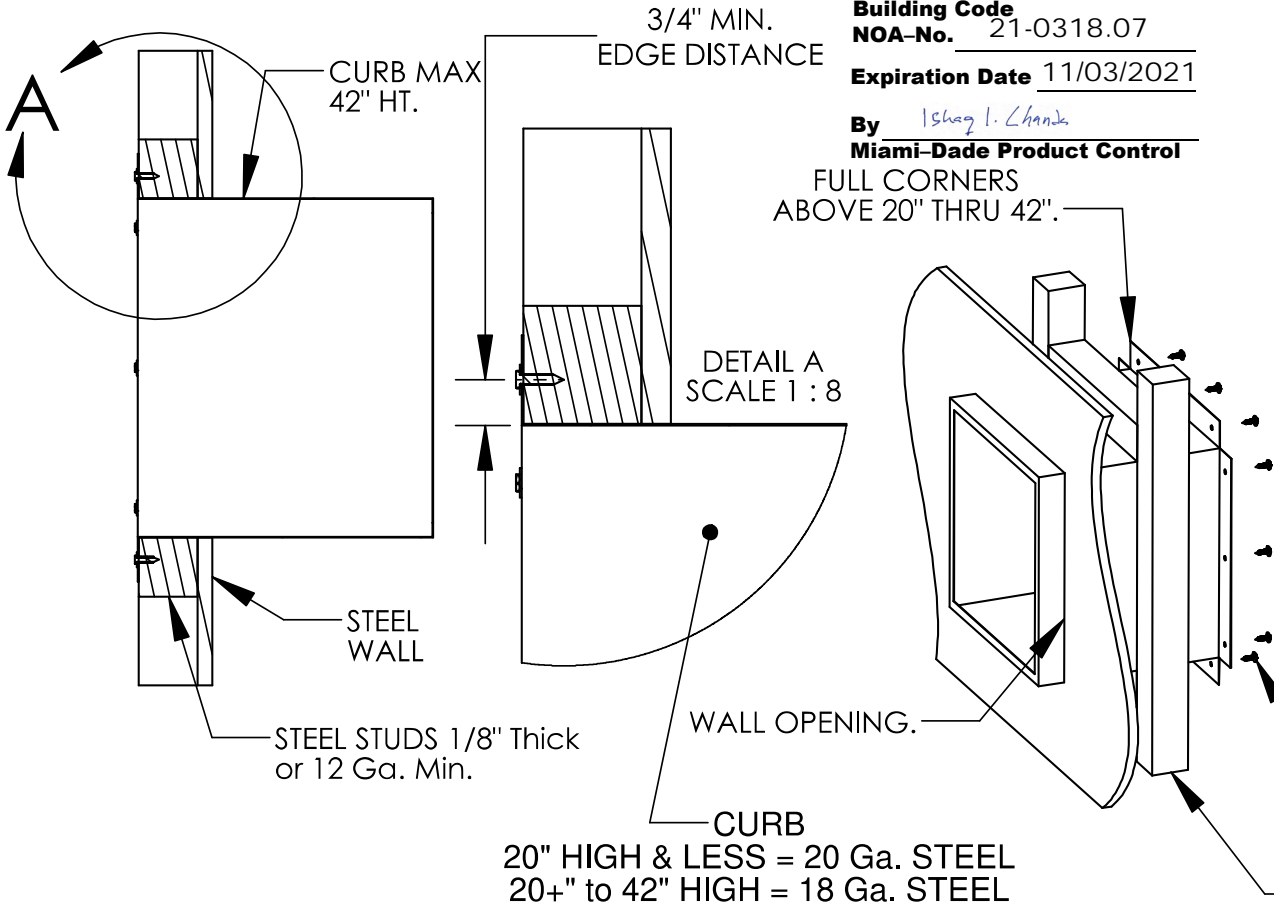
CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01
Expiration Date 11/03/2026
By [Signature]
Miami-Dade Product Control

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



STEEL CONSTRUCTION

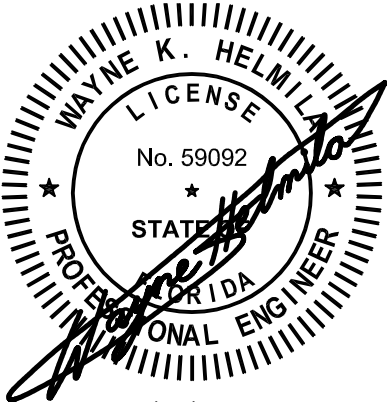


PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.07
Expiration Date 11/03/2021
By [Signature]
Miami-Dade Product Control

TABLE A: FAN TO CURB and TABLE B: CURB TO WALL tables listing unit sizes, base sizes, curb sizes, fasteners, and steel requirements.

SEE PAGE 12 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 15086, 15028, 15084, 15085, 15082, 15083.



06/28/2021
COA: 9090

ALTERNATE BRANDS

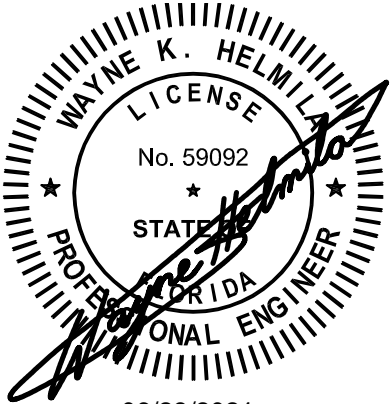
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0318.07
Expiration Date 11/03/2021
By Ishag I. Chande
Miami-Dade Product Control

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-1007.01
Expiration Date 11/03/2026
By [Signature]
Miami-Dade Product Control

GRAVITY VENTS	
CAS FAN MODEL	RUPP FAN MODEL
EMUA10	EMUA10-RA
EMUA12	EMUA12-RA
EMUA14	EMUA14-RA
EMUA18	EMUA18-RA
GV10	GV10-RA
GV12	GV12-RA
GV14	GV14-RA
GV18	GV18-RA
GV20	GV20-RA
GV24	GV24-RA
GV30	GV30-RA
GV36	GV36-RA
GVS1113	GVS1113-RA
GVS15	GVS15-RA
GVS1820	GVS1820-RA
GVS24	GVS24-RA
GVS30	GVS30-RA
GVS36	GVS36-RA
103CAPASYB08-2R	103CAPASYB08-2R-RA
103CAPASYB10-2R	103CAPASYB10-2R-RA
103CAPASYB12-2R	103CAPASYB12-2R-RA
103CAPASYB14-2R	103CAPASYB14-2R-RA
103CAPASYB16-2R	103CAPASYB16-2R-RA

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

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

Material: N/A
Blank Size: N/A
Weight: N/A
CONFIDENTIAL

Part Number: N/A
MACOLA/AX Number: N/A
Drawing Name: Gravity Vent
Drawn By: JJH
Parent Assembly: GRAVITY 12
Sheet: 12 of 12

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

