



City of Belle Isle Job Site Card **Roofing PERMIT** 2018-08-001

PERMIT MUST BE POSTED ON SITE - A permit expires in 6 months if approved inspections are not recorded /scheduled within that time frame. You are responsible for scheduling and keeping track of all your inspections -

Permit Number 2018-08-001

Issue Date: 07-31--2018

Site Address: 5134 Duban Ave. 32812

Parcel Number: 17-23-30-4384-02-640

Class: Residential

Subdivision:

Description of Work: Re-roof 2547 SQFT- Asphalt Shingles.

Issued To: Carroll Bradford Inc

Business Phone: 407 647-9420

Name: Menke, Jonathan

Contractor License CCC1330656

Payment Date & Method: 7 / 31 / 2018

Visa Master Card Amex Discover Check / Money Order # 5889

Schedule Inspections via Email at: BDscheduling@universalengineering.com

SCHEDULE INSPECTIONS BY 3:00 PM CUT OFF TIME

Inspection Results Will Be Sent Out the Following Business Day

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

ROOF INSPECTOR DATE COMMENTS

NEW ROOFS ONLY Code 700 Deck Nailing, Dry-In, Flashing			
Both new & re-roof Code 710 In-Progress			
Both new & re-roof Code 720 Final			

Inspection requests are to be emailed to BDscheduling@UniversalEngineering.com; a confirmation email will be sent back to you upon scheduling. **Next-Day Inspection requests must be made by 3:00 PM.** Please include the following in your request: Permit #, project address, type of inspection, date of the requested inspection, a contact name & a contact phone number. AM or PM may be requested but cannot be guaranteed.



RECEIVED
JUL 31 2018

City of Belle Isle
Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

APPLICATION FOR ROOFING PERMIT

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

DATE OF APPLICATION: _____ ROOF PERMIT NUMBER 208-08-001
PLEASE PRINT. The undersigned hereby applies for a permit to make installations as indicated below:

Project Address 5134 Duban Ave, Belle Isle, FL 32809 X 32812
Property Owner Seth & Jenny Richardson Phone 407-580-8809
Property Owner's Mailing Address 5134 Duban Ave City Belle Isle
State FL Zip Code 32812 Parcel Id Number: 17-23-30-4384-02-640

REQUIRED! To obtain this information, please visit <http://www.ocpafl.org/Searches/ParcelSearch.aspx>

Class of Building: Old New Type of Building: Residential Commercial Other
Type of Work: New Roof ReRoof

• REQUIRED! Florida Product Approval Form – NOTE: Installation instructions must be posted on-site before your first inspection!!

Please indicate the nature of work by completing the information below:

Roof Square Footage: 2,547 Number of Stories: 1 Job Valuation: \$ 20,169.81
Type: Asphalt Shingles Metal Modified Bitumen Other: _____

I hereby certify that the above is true and correct to the best of my knowledge and make Application for Permit as outlined above, and if same is granted I agree to conform to all Florida Building Code Regulations and City Ordinances regulating same and in accordance with plans submitted. The issuance of this permit does not grant permission to violate any applicable Town and/or State of Florida codes and/or ordinances. By signing below, I recognize Republic Services is by legal contract the sole authorized provider of garbage, recycling, yard waste, and commercial garbage and construction debris collection and disposal services with the city limits of the City. Contractors, homeowners and commercial businesses may contact Republic Services at 407-293-8000 to setup accounts for Commercial, Construction Roll Off, or other services needed. Rates are fixed by contract and are available at City Hall or from Republic Services. The City enforces the contract through its code enforcement office. Failure to comply will result in a stop work order.

LICENSE HOLDER SIGNATURE _____ LICENSE # CCC1330656
LICENSE HOLDER NAME Jonathan D. Menke COMPANY NAME Carroll Bradford, Inc
Street Address 4776 New Broad St, Suite 201
City Orlando State FL Zip Code 32814 Phone Number (407) 647-9420
Email Address permits@carrollbradford.com

Zoning Fee	\$ <u>30.00</u>
Building Fee	\$ <u>125.00</u> ✓
Review Fee	\$ <u>-</u>
1% BCAIB Fee	\$ <u>2.00</u>
1.5% DCA Fee	\$ <u>2.00</u>
Total Permit Fee	\$ <u>159.00</u>

Building Official: SM Date 7-31-18
Verified Contractor's Licenses & Insurance are on file ju Date 7-30-2018
✓ NOE
✓ PA

NOTE: The Building Permit Number is required if the Roof Installation is associated with any construction or alteration where a Building Permit has been issued. 1ST IC 25
20X 5 100
125

PAID
7-31-2018
VISA 5889

Permit Number: 2018-08-001
 Folio/Parcel ID #: 17-23-30-4384-02-640
 Prepared by: Jason Cavett

 Return to: Carroll Bradford, Inc.
4776 New Broad St. Suite 201
Orlando, FL 32814
 permits@carrollbradford.com

DOC# 20180446052
 07/27/2018 01:30:26 PM Page 1 of 1
 Rec Fee: \$10.00
 Phil Diamond, Comptroller
 Orange County, FL
 MB - Ret To: CAROLL BRADFORD INC

OC



NOTICE OF COMMENCEMENT

State of Florida, County of Orange
 The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. **Description of property** (legal description of the property, and street address if available)
LAKE CONWAY ESTATES SECTION 5 Y/112 LOT 264 5134 Duban Ave
2. **General description of improvement**
Residential Re-roof
3. **Owner information or Lessee information if the Lessee contracted for the improvement**
 Name Seth & Jenny Richardson
 Address 5134 Duban Ave, Belle Isle, FL 32812
 Interest in Property Owner
 Name and address of fee simple titleholder (if different from Owner listed above)
 Name _____
 Address _____
4. **Contractor**
 Name Carroll Bradford, Inc. Telephone Number (407) 647-9420
 Address 4776 New Broad St, Suite 201, Orlando, FL 32814
5. **Surety** (if applicable, a copy of the payment bond is attached)
 Name _____ Telephone Number _____
 Address _____ Amount of Bond \$ _____
6. **Lender**
 Name _____ Telephone Number _____
 Address _____
7. **Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by §713.13(1)(a)7, Florida Statutes.**
 Name _____ Telephone Number _____
 Address _____
8. **In addition to himself or herself, Owner designates the following to receive a copy of the Lienor's Notice as provided in §713.13(1)(b), Florida Statutes.**
 Name _____ Telephone Number _____
 Address _____
9. **Expiration date of notice of commencement** (the expiration date will be 1 year from the date of recording unless a different date is specified) _____

STATE OF FLORIDA, COUNTY OF ORANGE
 I hereby certify that this is a true copy of the document as reflected in the Official Records
 PHIL DIAMOND, COUNTY COMPTROLLER
 BY: [Signature] D.C.
 DATED: July 27, 2018

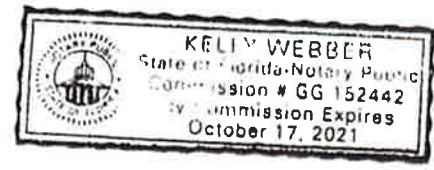
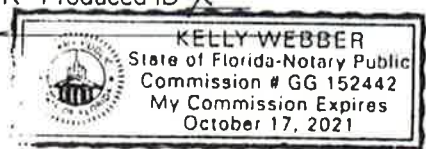
WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

 Signature of Owner or Lessee, or Owner's or Lessee's Authorized Officer/Director/Partner/Manager owner
 Signatory's Title/Office

The foregoing instrument was acknowledged before me this 20 day of 7/18 by Seth Richardson
 as owner for Seth Richardson
 Type of authority, e.g., officer, trustee, attorney in fact Name of party on behalf of whom instrument was executed

[Signature] _____
 Signature of Notary Public - State of Florida Print, type, or stamp commissioned name of Notary Public

Personally Known OR Produced ID X
 Type of ID Produced ID





City of Belle Isle
 Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

Product Approval Form

DATE: 07/25/2018

PERMIT # 2018-08-001

PROJECT ADDRESS 5134 Duban Ave

Belle Isle, FL 32809 32812

As required by Florida Statue 553.842 and Florida Administrative Code 9B-72m, please provide the information and approval numbers of the building components listed below if they will be utilized on the building or structure. FL Approved products are listed online at www.floridabuilding.org or can be obtained from the local product supplier. The following information must be turned in with permit application and available onsite for inspections:

1. This Product Approval Cover Sheet
2. Internet screen from FloridaBuilding.org showing PA#, approval and code edition stamped
3. Manufacturer's installation details from FloridaBuilding.org and requirements for each product stamped

Product Type	Manufacturer	Model/Series	FL Product Approval #	Product Type	Manufacturer	Model/Series	FL Product Approval #
EXTERIOR DOORS				WALL PANELS			
Swinging				Sliding			
Sliding				Soffits			
Sectional/Rollup				Storefront			
Other				Glass Block			
				Other			
WINDOWS				ROOFING PRODUCTS			
Single/Dbf Hung				Asphalt Shingles	GAF	TIMBERLINE HO	10124-R20
Horizontal Slider				Non Struct Metal			
Casement				Roofing Tiles			
Fixed				Single Ply Roof			
Mullion				Other	GAF		FL 6267-R14
Skylights				underlayment	GAF		FL 18686-R3
Other							
STRUCTURAL COMPONENTS				OTHER			
Wood Connectors							
Wood Anchors							
Truss Plates							
Insulation Forms							
Lintels							
Other							

It is the applicant's responsibility to verify that specific products have been installed in accordance with their limitations and with the minimum required design pressures for the structure. Specific compliance will be verified during field inspections.

Applicant Signature _____

Date 7-26-18



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Product Approval
USER: Public User

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FL #	FL10124-R20												
Application Type	Revision												
Code Version	2017												
Application Status	Approved												
Comments													
Archived	<input type="checkbox"/>												
Product Manufacturer	GAF												
Address/Phone/Email	1 Campus Drive Parisspany, NJ 07054 (800) 766-3411 mstieh@gaf.com												
Authorized Signature	Robert Nieminen lindareith@trlnityerd.com												
Technical Representative	William Broussard												
Address/Phone/Email	1 Campus Drive Parsippany, NJ 07054 (800) 766-3411 TechnicalQuestionsGAF@gaf.com												
Quality Assurance Representative													
Address/Phone/Email													
Category	Roofing												
Subcategory	Asphalt Shingles												
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> Evaluation Report - Hardcopy Received												
Florida Engineer or Architect Name who developed the Evaluation Report	Robert Nieminen												
Florida License	PE-59166												
Quality Assurance Entity	UL LLC												
Quality Assurance Contract Expiration Date	10/20/2018												
Validated By	John W. Knezevich, PE <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received												
Certificate of Independence	FL10124_R20_COI_2017_01_COI_Nieminen.pdf												
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th>Standard</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>ASTM D1970</td> <td>2015</td> </tr> <tr> <td>ASTM D3161</td> <td>2016</td> </tr> <tr> <td>ASTM D3462</td> <td>2010</td> </tr> <tr> <td>ASTM D7158</td> <td>2011</td> </tr> <tr> <td>TAS 107</td> <td>1995</td> </tr> </tbody> </table>	Standard	Year	ASTM D1970	2015	ASTM D3161	2016	ASTM D3462	2010	ASTM D7158	2011	TAS 107	1995
Standard	Year												
ASTM D1970	2015												
ASTM D3161	2016												
ASTM D3462	2010												
ASTM D7158	2011												
TAS 107	1995												
Equivalence of Product Standards Certified By													
Sections from the Code													



EXTERIOR RESEARCH & DESIGN, LLC.

Certificate of Authorization #9503

353 CHRISTIAN STREET, UNIT #13

OXFORD, CT 06478

(203) 262-9245

EVALUATION REPORT

GAF

1 Campus Drive
Parsippany, NJ 07054
(800) 766-3411

Evaluation Report 01506.01.08-R22

FL10124-R20

Date of Issuance: 01/03/2008

Revision 22: 09/20/2017

SCOPE:

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **6th Edition (2017) Florida Building Code** sections noted herein.

DESCRIPTION: GAF Asphalt Roof Shingles

LABELING: Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein and **FBC 1507.2.7.1 / R905.2.6.1**.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. if the product changes or the referenced Quality Assurance documentation changes. Trinity|ERD requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Evaluation Report number preceded by the words "Trinity|ERD Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report 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 Evaluation Report consists of pages 1 through 6.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 09/20/2017. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

1. Trinity|ERD does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. Trinity|ERD is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING SYSTEMS EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Asphalt Shingles

Compliance Statement: GAF Asphalt Roof Shingles, as produced by GAF, have demonstrated compliance with the following sections of the 6th Edition (2017) Florida Building Code and Florida Building Code, Residential Volume through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

<u>Section</u>	<u>Property</u>	<u>Standard</u>	<u>Year</u>
1507.2.4 / 1507.1.1, R905.2.3 / R905.1.1	Physical Properties	ASTM D1970	2015
1507.2.5, R905.2.4	Physical Properties	ASTM D3462	2010
1507.2.7.1, R905.2.6.1	Wind Resistance	ASTM D3161	2016
1507.2.7.1, R905.2.6.1	Wind Resistance	ASTM D7158	2011
1507.2.7.1, R905.2.6.1	Wind Resistance	TAS 107	1995

3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
GAF (PDM 1915)	Letter of Equivalency	Seal-A-Ridge Impact Resistant IR	01/13/2012
PRI (TST 5878)	Physical Properties	GAF-025-02-01	03/27/2002
PRI (TST 5878)	ASTM D3462	GAF-059-02-01	09/02/2004
PRI (TST 5878)	ASTM D3462	GAF-080-02-01	05/25/2005
PRI (TST 5878)	Physical Properties	GAF-324-02-01	12/01/2011
PRI (TST 5878)	Wind Driven Rain	GAF-407-02-01	01/21/2013
UL (TST 1740)	ASTM D3462	93NK6295	11/29/1993
UL (TST 1740)	ASTM D3462	99NK43835	01/12/2000
UL (TST 1740)	TAS 107	94NK9632	03/29/2000
UL (TST 1740)	ASTM D3462	01NK06632	02/02/2001
UL (TST 1740)	ASTM D3161, TAS 107	01NK9226	05/21/2001
UL (TST 1740)	ASTM D3161	01NK37122	12/18/2001
UL (TST 1740)	ASTM D3462	01NK37122	12/19/2001
UL (TST 1740)	ASTM D3161, TAS 107	02NK12980	04/10/2002
UL (TST 1740)	ASTM D3161, TAS 107	02NK30871	09/09/2002
UL (TST 1740)	ASTM D3161	03CA5367	03/11/2003
UL (TST 1740)	ASTM D3462	03NK26444	10/17/2003
UL (TST 1740)	ASTM D3462	04NK13850	06/07/2004
UL (TST 1740)	ASTM D3161	04NK13850	06/23/2004
UL (TST 1740)	ASTM D3161	04NK30546	03/10/2005
UL (TST 1740)	ASTM D3462	04NK22009	05/06/2005
UL (TST 1740)	ASTM D3161	04NK22009	05/09/2005
UL (TST 1740)	ASTM D3462	05NK27924	02/10/2006
UL (TST 1740)	ASTM D3161	05NK27924	02/11/2006
UL (TST 1740)	ASTM D3161, D3462	06CA18077	06/05/2006
UL (TST 1740)	ASTM D3161, D3462	06CA18074	06/16/2006
UL (TST 1740)	ASTM D3161, D3462	06CA35251	10/18/2006
UL (TST 1740)	ASTM D3462	06CA31603	12/01/2006
UL (TST 1740)	ASTM D3161, D3462	06CA41095	12/27/2006
UL (TST 1740)	ASTM D3161	07NK05228	03/13/2007
UL (TST 1740)	ASTM D3161	06CA31611	04/04/2007
UL (TST 1740)	ASTM D3161	06CA61148	04/09/2007
UL (TST 1740)	ASTM D3161, D3462	07CA31742	11/08/2007
UL (TST 1740)	ASTM D3161, D7158, D3462	08CA06100	03/13/2008

Entity	Examination	Reference	Date
UL (TST 1740)	ASTM D3161, D3462	07CA55908	04/01/2008
UL (TST 1740)	ASTM D3161, D3462	09CA10592	03/26/2009
UL (TST 1740)	ASTM D3161, D3462	09CA06856	05/15/2009
UL (TST 1740)	ASTM D3161, D7158, D3462	09NK06647	08/01/2009
UL (TST 1740)	ASTM D3161, D7158, D3462	09CA27281	08/27/2009
UL (TST 1740)	ASTM D3161, D7158, D3462	10CA35554	03/05/2010
UL (TST 1740)	ASTM D3161, D7158, D3462	10CA13686	05/15/2010
UL (TST 1740)	ASTM D3462	10CA07264	05/27/2010
UL (TST 1740)	ASTM D3462	10CA11953	10/29/2010
UL (TST 1740)	ASTM D3161, D7158, D3462	10NK11951	10/30/2010
UL (TST 1740)	ASTM D3161, D7158, D3462	10NK12070	11/04/2010
UL (TST 1740)	ASTM D3161, D7158, D3462	08CA06100	01/30/2010
UL (TST 1740)	ASTM D3161, D7158, D3462	10CA53934	03/31/2011
UL (TST 1740)	ASTM D3161, D7158, D3462	11CA48924	10/22/2011
UL (TST 1740)	ASTM D3161, D7158, D3462	11CA47919	12/03/2011
UL (TST 1740)	ASTM D3161, D7158, D3462	11CA48408	12/08/2011
UL (TST 1740)	ASTM D3161, D7158, D3462	11CA48725	12/09/2011
UL, LLC. (TST 9628)	ASTM D3462	12CA34891	10/12/2012
UL, LLC. (TST 9628)	ASTM D3161, D7158, D3462	12CA58151	02/15/2013
UL, LLC. (TST 9628)	ASTM D3161	12CA38083	02/26/2013
UL, LLC. (TST 9628)	ASTM D3161	13CA32332	06/18/2013
UL, LLC. (TST 9628)	ASTM D3161	13CA37934	08/02/2013
UL, LLC. (TST 9628)	ASTM D3161, D7158, D3462	4786875675	07/17/2015
UL, LLC. (TST 9628)	ASTM D3161, D7158, D3462	4787434542	05/17/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Mobile, AL	10/25/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Myerstown, PA	10/20/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Tuscaloosa, AL	11/11/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Michigan Cty, IN	11/01/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Shafter, CA	11/17/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Savannah, GA	11/11/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Minneapolis, MN	10/25/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Mt. Vernon, IN	10/25/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Baltimore, MD	10/21/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Tampa, FL	11/17/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Dallas, TX	11/04/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Ennis, TX	11/03/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Fontana, CA	11/01/2016

4. PRODUCT DESCRIPTION:

4.1 Asphalt Shingles:

- 4.1.1 Marquis® WeatherMax®, Royal Sovereign® and Sentinel® are a fiberglass reinforced 3-tab asphalt roof shingles.
- 4.1.2 Camelot®, Camelot® II, Fortitude™, Glenwood™, Grand Canyon®, Grand Sequoia®, Grand Sequoia® IR, Grand Sequoia® ArmorShield™, Monaco®, Sienna®, Timberline® American Harvest®, Timberline® ArmorShield™ II, Timberline® Natural Shadow®, Timberline HD®, Timberline® Cool Series®, Timberline Ultra HD® and Woodland® are fiberglass reinforced, laminated asphalt roof shingles.
- 4.1.3 Slateline® is a fiberglass reinforced 5-tab asphalt roof shingle.

4.2 Hip & Ridge Shingles:

- 4.2.1 Seal-A-Ridge® Ridge Cap Shingles, Seal-A-Ridge® IR Impact-Resistant Ridge Cap Shingles, Seal-A-Ridge® ArmorShield™ Ridge Cap Shingles and Timbertex® Premium Ridge Cap Shingles are fiberglass reinforced, hip and ridge asphalt roof shingles.

4.3 Accessory Starter Strips:

- 4.3.1 Pro-Start® Eave/Rake Starter Strip Shingles and WeatherBlocker™ Premium Eave/Rake Starter Strip Shingles are starter strips for asphalt roof shingles.
- 4.3.2 QuickStart® Peel & Stick Starter Roll is a mineral-surfaced, fiberglass-reinforced, self-adhering SBS modified bitumen starter strip, nominal 9-inch x 33 ft roll, for use with asphalt shingles with exposure of 6-inch or less.
- 4.3.3 StarterMatch™ Starter Strip Shingles are color-coordinated starter strips for use with Grand Canyon® and Grand Sequoia® series asphalt shingles. StarterMatch™ are installed as the second starter for Grand Canyon® and Grand Sequoia® series installations.

5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use in FBC HVHZ jurisdictions.
- 5.3 Fire Classification is not part of this Evaluation Report; refer to current Approved Roofing Materials Directory for fire ratings of this product.

5.4 Wind Classification:

- 5.4.1 The **GAF asphalt shingles** noted in **Section 4.1** are Classified in accordance with **FBC Tables 1507.2.7.1 and R905.2.6.1** to **ASTM D3161, Class F** and/or **ASTM D7158, Class H**, indicating the shingles are acceptable for use in all wind zones up to $V_{asd} = 150$ mph ($V_{ult} = 194$ mph). Refer to Section 6 for installation requirements to meet this wind rating.
- 5.4.2 The **GAF hip & ridge shingles** noted in **Section 4.2** are Classified in accordance with **FBC Tables 1507.2.7.1 and R905.2.6.1** to **ASTM D3161, Class F**, indicating the shingles are acceptable for use in all wind zones up to $V_{asd} = 150$ mph ($V_{ult} = 194$ mph). Refer to Section 6 for installation requirements to meet this wind rating.
- 5.4.3 Classification by **ASTM D7158** applies only to **exposure category B or C**, as defined in **FBC 1609.4.3**, and a **mean roof height of 60 feet or less**. Calculations by a qualified design professional are required for conditions outside these limitations. Contact the shingle manufacturer for data specific to each shingle.
- 5.5 All products in the roof assembly shall have quality assurance audit in accordance with **F.A.C. Rule 61G20-3**.

6. INSTALLATION:

6.1 Underlayment:

- 6.1.1 Underlayment shall be acceptable to **GAF** and shall hold current Florida Statewide Product Approval, or be Locally Approved per **Rule 61G20-3**, per **FBC 1507.2.3, 1507.2.4** or **R905.2.3**.

6.2 Starter Shingles or Starter Strip:

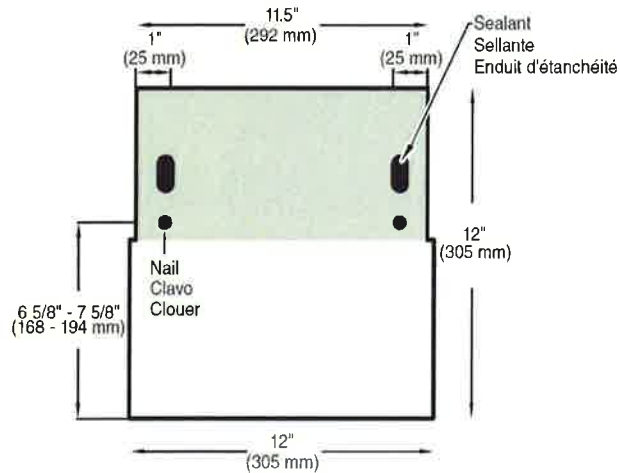
- 6.2.1 Installation of **Pro-Start Eave/Rake Starter Strip Shingles, WeatherBlocker Premium Eave/Rake Starter Strip Shingles** and **QuickStart Peel & Stick Starter Roll** shall comply with the **GAF** current published instructions.

6.3 Asphalt Shingles:

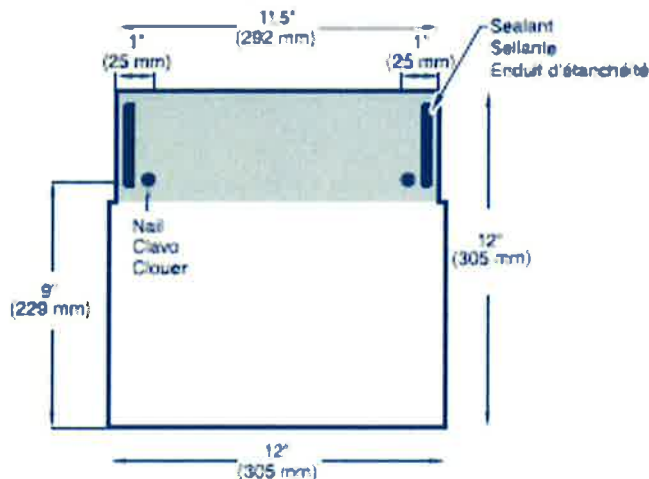
- 6.3.1 Installation of asphalt shingles shall comply with the **GAF** current published instructions, using minimum four (4) nails per shingle in accordance with **FBC 1507.2.7** or **R905.2.6**, with the following exceptions:
 - **Camelot, Camelot II, Grand Canyon, Grand Sequoia, Grand Sequoia IR, Grand Sequoia ArmorShield,** and **Woodland** require minimum five (5) nails per shingle.
 - **Slateline** requires minimum six (6) nails per shingle.
- 6.3.2 Fasteners shall be in accordance with manufacturer's published requirements, but not less than **FBC 1507.2.6** or **R905.2.5**. Staples are not permitted.
- 6.3.3 Where the roof slope exceeds 21 units vertical in 12 units horizontal, special methods of fastening are required. Contact the GAF for details.

6.4 Hip & Ridge Shingles:

6.4.1 Installation of **Seal-A-Ridge Ridge Cap Shingles**, **Seal-A-Ridge IR Impact-Resistant Ridge Cap Shingles** and **Seal-A-Ridge ArmorShield Ridge Cap Shingles** shall comply with the GAF current published instructions with a minimum two (2) nails, minimum 3/8-inch head diameter, per shingle and nominal 0.25-inch diameter beads of **Henkel "Loctite PL S30 Roof & Flashing Sealant"**.



6.4.2 Installation of **Timbertex Premium Ridge Cap Shingles** shall comply with GAF current published instructions with a minimum two (2) nails, minimum 3/8-inch head diameter, per shingle and beads of **Sonneborn NP1 Gun Grade Polyurethane Sealant** or **Henkel PL Roofing and Flashing Sealant**.



6.4.3 Fasteners shall be in accordance with GAF published requirements, but not less than **FBC 1507.2.6** or **R905.2.5**. Staples are not permitted.



7. LABELING:

- 7.1 Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein.
- 7.2 Asphalt shingle wrappers shall indicate compliance with one of the required classifications detailed in **FBC Table 1507.2.7.1 / R905.2.6.1.**

8. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction in order to properly evaluate the installation of this product.

9. MANUFACTURING PLANTS:

Contact the named QA entity for information on which plants produce products covered by Florida Rule 61G20-3 QA requirements.

10. QUALITY ASSURANCE ENTITY:

UL LLC – QUA9625; (847) 664-3281

- **END OF EVALUATION REPORT** -



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Product Approval
USER: Public User

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FL #	FL18686-R3				
Application Type	Revision				
Code Version	2017				
Application Status	Approved				
	*Approved by DBPR. Approvals by DBPR shall be reviewed and ratified by the POC and/or the Commission if necessary.				
Comments					
Archived	<input type="checkbox"/>				
Product Manufacturer	GAF				
Address/Phone/Email	1 Campus Drive Parsippany, NJ 07054 (800) 766-3411 mstieh@gaf.com				
Authorized Signature	Michael Stieh mstieh@gaf.com				
Technical Representative	Michael Stieh				
Address/Phone/Email	1 Campus Drive Parsippany, NJ 07054 (973) 628-3000 mstieh@gaf.com				
Quality Assurance Representative	Richard Weiman				
Address/Phone/Email	1 Campus Drive Parsippany, NJ 07054 (973) 872-4421 RWeiman@gaf.com				
Category	Roofing				
Subcategory	Underlayments				
Compliance Method	Evaluation Report from a Product Evaluation Entity				
Evaluation Entity	Miami-Dade BCCO - EVL				
Quality Assurance Entity	Miami-Dade BCCO - CER				
Quality Assurance Contract Expiration Date	02/22/2023				
Validated By	Miami-Dade BCCO - VAL				
Certificate of Independence					
Referenced Standard and Year (of Standard)	<table border="0"> <tr> <td>Standard</td> <td>Year</td> </tr> <tr> <td>ASTM D226</td> <td>2009</td> </tr> </table>	Standard	Year	ASTM D226	2009
Standard	Year				
ASTM D226	2009				
Equivalence of Product Standards Certified By					
Sections from the Code					

Product Approval Method Method 1 Option C

Date Submitted 02/26/2018

Date Validated 03/16/2018

Date Pending FBC Approval

Date Approved 03/26/2018

Summary of Products

FL #	Model, Number or Name	Description
18686.1	FeltBuster	High-Traction Synthetic Roofing Felt
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: No Design Pressure: N/A Other:		Installation Instructions FL18686_R3_If_18-0119.15.pdf Verified By: Miami-Dade BCCO - EVL Created by Independent Third Party: Evaluation Reports FL18686_R3_AE_18-0119.15.pdf

[Back](#) [Next](#)

Contact Us :: 2601 Blair Stone Road, Tallahassee FL 32399 Phone: 850-487-1824

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2017 Florida Building Code - Residential, Sixth Edition

CHAPTER 9 ROOF ASSEMBLIES

***Underlayment Attachment**

1. Roof slopes from two units vertical in 12 units horizontal (17-percent slope), and less than four units vertical in 12 units horizontal (33-percent slope). Apply a 19-inch (483 mm) strip of underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment, overlapping successive sheets 19 inches (483 mm), end laps shall be 6 inches and shall be offset by 6 feet. The underlayment shall be attached to a nailable deck with corrosion-resistant fasteners with one row centered in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) o.c., and one row at the end and side laps fastened 6 inches (152 mm) o.c. Underlayment shall be attached using metal or plastic cap nails with a nominal cap diameter of not less than 1 inch. Metal caps shall have a thickness of not less than 32-gage sheet metal. Power-driven metal caps shall have a minimum thickness of 0.010 inch. Minimum thickness of the outside edge of plastic caps shall be 0.035 inch. The cap nail shank shall be not less than 0.083 inch for ring shank cap nails and 0.091 inch for smooth shank cap nails. Cap nail shank shall have a length sufficient to penetrate through the roof sheathing or not less than 3/4 inch into the roof sheathing.
2. Roof slopes of four units vertical in 12 units horizontal (33-percent slope) or greater. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 4 inches (51 mm), and laps shall be 6 inches and shall be offset by 6 feet. The underlayment shall be attached to a nailable deck with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) o.c., and one row at the end and side laps fastened 6 inches (152 mm) o.c. Underlayment shall be attached using metal or plastic cap nails with a nominal cap diameter of not less than 1 inch. Metal caps shall have a thickness of not less than 32-gage sheet metal. Power-driven metal caps shall have a minimum thickness of 0.010 inch. Minimum thickness of the outside edge of plastic caps shall be 0.035 inch. The cap nail shank shall be not less than 0.083 inch for ring shank cap nails and 0.091 inch for smooth shank cap nails. Cap nail shank shall have a length sufficient to penetrate through the roof sheathing or not less than 3/4 inch into the roof sheathing.
3. Roof slopes from two units vertical in 12 units horizontal (17-percent slope) and greater. The entire roof deck shall be covered with an approved self-adhering polymer modified bitumen underlayment complying with ASTM D1970 installed in accordance with both the underlayment manufacturer's and roof covering manufacturer's installation instructions for the deck material, roof ventilation configuration and climate exposure for the roof covering to be installed.

Exception: A minimum 4-inch-wide (102 mm) strip of self-adhering polymer-modified bitumen membrane complying with ASTM D1970, installed in accordance with the manufacturer's instructions for the deck material, shall be applied over all joints in the roof decking. An approved underlayment in accordance with Table R905.1.1 for the applicable roof covering shall be applied over the entire roof over the 4-inch-wide (102 mm) membrane strips.

2017 Florida Building Code - Residential, Sixth Edition

CHAPTER 9 ROOF ASSEMBLIES

specified in this section, roof coverings shall be installed to resist the component and cladding loads specified in Table R301.2(2), adjusted for height and exposure in accordance with Table R301.2(3).

R905.1.1 Underlayment.

Unless otherwise noted underlayment for asphalt shingles, metal roof shingles, mineral-surfaced roll roofing, slate and slate-type shingles, wood shingles, wood shakes and metal roof panels shall conform to the applicable standards listed in this chapter. Underlayment materials required to comply with ASTM D226, D1970, D4869 and D6757 shall bear a label indicating compliance to the standard designation and, if applicable, type classification indicated in Table R905.1.1. Underlayment shall be applied and attached in accordance with Table R905.1.1.

Exception: A reinforced synthetic underlayment that is approved as an alternate to underlayment complying with ASTM D226 Type II and having a minimum tear strength in accordance with ASTM D1970 or ASTM D4533 of 20 pounds shall be permitted. This underlayment shall be installed and attached in accordance with the underlayment attachment methods of Table R905.1.1 for the applicable roof covering and slope, except metal cap nails shall be required where the ultimate design wind speed, V_{ult} , equals or exceeds 150 mph.

Table R905.1.1(1) Underlayment Types.

Reserved.

**TABLE R905.1.1
UNDERLAYMENT TABLE**

Roof Covering Section	Roof Slope 2:12 and Less Than 4:12 Underlayment	Underlayment Attachment ^a	Roof Slope 4:12 and Greater Underlayment	Underlayment Attachment ^a
Asphalt shingles R905.2	ASTM D226 Type I or II ASTM D4869 Type II, III or IV ASTM D6757	1	ASTM D226 Type II ASTM D4869 Type IV ASTM D6757	2
	ASTM D1970	3	ASTM D1970	3
Concrete and Clay Tile R905.3	See Section R905.3.3			
Metal roof shingles R905.4	ASTM D226 Type I or II ASTM D4869 Type II, III or IV ASTM D6757	1	ASTM D226 Type II ASTM D4869 Type IV	2



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

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

GAF
1 Campus Drive
Parsipanny, NJ 07054

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 of the Florida Building Code.

DESCRIPTION: GAF Leak Barriers and Roof Deck Protection

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state 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 and revises NOA 16-1213.04 and consists of pages 1 through 10.
The submitted documentation was reviewed by Hamley Pacheco, P.E.



NOA No.: 18-0119.15
Expiration Date: 02/22/23
Approval Date: 02/22/18
Page 1 of 10

ROOFING COMPONENT APPROVAL

Category: Roofing
Sub-Category: Underlayment
Material: SBS/Polypropylene/Asphalt

PRODUCTS DESCRIPTION:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
WeatherWatch® Mineral Surfaced Leak Barrier <i>Manufacturing</i> <i>Location #1, 9</i>	36" x 50' rolls 36" x 66.7' rolls	ASTM D 1970	Granular surfaced modified, fiberglass reinforced, bituminous sheet material for use as a leak barrier underlayment in sloped roof assemblies. Designed as an ice & rain shield.
StormGuard® Film Surfaced Leak Barrier <i>Manufacturing</i> <i>Location #1, 9</i>	36" x 66.7' rolls	ASTM D 1970	Modified, fiberglass reinforced, bituminous sheet material for use as a high temperature leak barrier underlayment in sloped roof assemblies. Designed as an ice & rain shield.
Liberty™ SBS Self-Adhering Base/Ply Sheet <i>Manufacturing</i> <i>Location #1, 9</i>	39- ³ / ₈ " x 66' rolls	ASTM D 1970 ASTM D4601 Type II	Self-adhering SBS roof membrane.
Deck-Armor™ Premium Breathable Roof Deck Protection <i>Manufacturing</i> <i>Location #2</i>	54" x 222' rolls 48" x 100' rolls	ASTM D 226 Type II	A UV-stabilized polypropylene breathable underlayment. To be used for roof deck protection as an underlayment in sloped roof assemblies.
Tiger Paw™ Roof Deck Protection <i>Manufacturing</i> <i>Location #3, 5, 6</i>	48" x 250' rolls 48" x 100' rolls	ASTM D 226 Type II	A UV-stabilized polypropylene non-breathable underlayment. To be used for roof deck protection as an underlayment in sloped roof assemblies.
FeltBuster® High-Traction Synthetic Roofing Felt <i>Manufacturing</i> <i>Location #7, 8</i>	48" x 250' rolls	ASTM D 226 Type I	A UV-stabilized polypropylene non-breathable underlayment. To be used for roof deck protection as an underlayment in sloped roof assemblies.
Shingle-Mate® Roof Deck Protection <i>Manufacturing</i> <i>Location #4</i>	36" x 144' rolls	ASTM D 226 Type I	Fiberglass-reinforced asphalt felt underlayment. To be used for roof deck protection as an underlayment in sloped roof assemblies.



NOA No.: 18-0119.15
 Expiration Date: 02/22/23
 Approval Date: 02/22/18
 Page 2 of 10

PRODUCTS DESCRIPTION:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Liberty™ SA Glass Cap Sheet <i>Manufacturing Location # 9</i>	39- ³ / ₈ " x 34' rolls	ASTM D 1970 ASTM D 6163 ASTM D 7530	Granular surfaced modified, fiberglass reinforced, self-adhering SBS roof membrane.
GAFGLAS® Ply 4 <i>Manufacturing Location # 9, 10</i>	39.37" (1 meter) Wide	ASTM D2178 Type IV	Asphalt impregnated glass felt with asphalt coating.
GAFGLAS® FlexPly™ 6 <i>Manufacturing Location # 9, 10</i>	39.37" (1 meter) Wide	ASTM D2178 Type VI	Asphalt impregnated glass felt with asphalt coating.

MANUFACTURING LOCATION:

- 1.Mt. Vernon, IN
- 2.North Bay, Ontario
- 3.Mission, British Columbia
- 4.Pryor, OK
- 5.Qingdao, China
- 6.Charleston, SC
- 7.Spartanburg, SC
- 8.Dadra, India
- 9.Savannah, GA
- 10.Mobile, AL



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Intertek Testing Services NA Ltd.	3077464-01	ASTM D 1970	08/23/06
	3090131	Wind Uplift and Self Sealability	08/23/06
	100258583COQ-010A	ASTM D 226 Type II	01/08/11
	100673818COQ-003	ASTM D 226 Type II	06/13/13
	101572890COQ-005	ASTM D 226 Type II	04/17/14
	F8549.02-106-18	ASTM D 226 Type I	11/08/16
PRI Construction Materials Technologies, LLC.	RGM-023-02-01	ASTM D 4798	05/16/07
	GAF-112-02-01	ASTM D 226 Type II	03/15/06
	GAF-238-02-01	ASTM D 1970	03/03/10
	GAF-323-02-01	ASTM D 1970	11/30/11
	GAF-324-02-01	ASTM D 1970	12/01/11
	GAF-325-02-01	ASTM D 1970	12/01/11
	GAF-326-02-01	ASTM D 1970	11/30/11
	GAF-275-02-01	ASTM D 1970	11/11/10
	GAF-344-02-01	ASTM D 1970	04/23/12
	GAF-339-02-01	ASTM D 226 Type I	03/14/12
	ELK-311-02-01	ASTM D 1970	09/11/07
	GAF-518-02-01	ASTM D 226 Type I	06/04/14
	GAF-818-02-01	ASTM D 4533	12/06/17
	GAF-829-02-01	ASTM D 226 Type II	01/15/18
	GAF-314-02-01	ASTM D 2178	07/21/11
	GAF-315-02-01	ASTM D 2178	07/21/11
Trinity-ERD	GAF-SC13285.03.17-1	ASTM D 1970	03/08/17
	GAF-SC13285.03.17-3	ASTM D 1970	03/01/17
	GAF-SC13285.03.17-4	ASTM D 1970	03/01/17
	GAF-SC13285.02.17-2	ASTM D 4601 Type II	02/08/17
	GAF-SC9700.08-15-R1	ASTM D 2178	09/09/15
	GAF-SC12915.12.17-R1	ASTM D 1970	12/11/17
	GAF-SC12915.12.17-R1	ASTM D 6163	12/11/17
	GAF-SC12915.12.17-R1	ASTM D 7530	12/11/17



APPROVED ASSEMBLIES:

Deck Type 1: Wood, non-insulated

Deck Description: 1⁹/₃₂" or greater plywood or wood plank

System E (1): Anchor sheet mechanically fastened to deck, membrane adhered.

Base Sheet: Two plies of ASTM D 226 Type I or Shingle-Mate® Roof Deck Protection OR one or more plies of ASTM D 226 Type II, Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® High-Traction Synthetic Roofing Felt, or Tiger Paw™ Roof Deck Protection with a minimum 4" side lap and a 6" end lap mechanically fastened to the deck with approved nails and tin caps 6" o.c. at the laps and four staggered rows 12" o.c. in the field of the roll.

If roof is exposed to rain/snow, tape all end and side laps with approved butyl adhesive based seam/cover tape or an approved waterproof cloth duct tape (follow the tape's manufacturer's installation instructions). Always apply tape over all fasteners at the center of the roll or the end laps to help prevent rain or snow from entering at the fasteners.

Membrane: One or more plies of WeatherWatch® Mineral Surfaced Leak Barrier, StormGuard® Film Surfaced Leak Barrier, Liberty™ SA Glass Cap Sheet, or Liberty™ SBS Self-Adhering Base/Ply Sheet membrane with a minimum 3" side lap and 6" end lap. Place the first course of membrane parallel to the eave, rolling the membrane to obtain maximum contact. Remove the release membrane as the membrane is applied. Vertical strapping of the roof with WeatherWatch® Mineral Surfaced Leak Barrier, or StormGuard® Film Surfaced Leak Barrier is acceptable.

Surfacing: Approved Roofing Assembly.



Deck Type 1: Wood, non-insulated

Deck Description: 1⁹/₃₂" or greater plywood or wood plank

System E(2): Membrane mechanically fastened to deck.

Separator Sheet: One or more plies of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, Shingle-Mate® Roof Deck Protection, Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® High-Traction Synthetic Roofing Felt, or Tiger Paw™ Roof Deck Protection loose laid.

Membrane: One or more plies of WeatherWatch® Mineral Surfaced Leak Barrier, StormGuard® Film Surfaced Leak Barrier, Liberty™ SA Glass Cap Sheet, or Liberty™ SBS Self-Adhering Base/Ply Sheet membrane mechanically fastened with a minimum 3" side lap and a 6" end lap to deck through the separator sheet with approved nails and tin caps 6" o.c. at the laps and two staggered rows 12" o.c. in the field of the roll.

Surfacing: Approved Roofing Assembly.



Deck Type 1: Wood, non-insulated

Deck Description: 1⁹/₃₂" or greater plywood or wood plank

System E (3): Anchor sheet mechanically fastened to deck, membrane adhered.

Secondary Water Barrier: Install a minimum 4" wide WeatherWatch[®] Mineral Surfaced Leak Barrier, , Liberty[™] SBS Self-Adhering Base/Ply Sheet, Liberty[™] SA Glass Cap Sheet, or StormGuard[®] Film Surfaced Leak Barrier membrane over the joints of the plywood roof deck prior to installation of the base sheet. Do not overlap end or side joints. All side and end laps should be butted firmly side by side, flush with each other but not overlapped. Do not leave the WeatherWatch[®] Mineral Surfaced Leak Barrier, or StormGuard[®] Film Surfaced Leak Barrier membrane exposed for more than 30 days without a roof deck protection underlayment protecting the secondary water barrier.

(Optional)

Base Sheet: Two plies of ASTM D 226 Type I or Shingle-Mate[®] Roof Deck Protection OR one or more plies of ASTM D 226 Type II, Deck-Armor[™] Premium Breathable Roof Deck Protection, FeltBuster[®] High-Traction Synthetic Roofing Felt, or Tiger Paw[™] Roof Deck Protection with a minimum 4" side lap and a 6" end lap mechanically fastened to the deck with approved nails and tin caps 6" o.c. at the laps and four staggered rows 12" o.c. in the field of the roll.

If roof is exposed to rain/snow, tape all end and side laps with approved butyl adhesive based seam/cover tape or an approved waterproof cloth duct tape (follow the tape manufacturer's installation instructions). Always apply tape over all fasteners at the center of the roll or the end laps to help prevent rain or snow from entering at the fasteners.

Surfacing: Approved Roofing Assembly.



- Deck Type 1:** Wood, non-insulated
- Deck Description:** 1⁹/₃₂" or greater plywood or wood plank
- System E (4):** Anchor sheet mechanically fastened to deck, membrane adhered.
- Base Sheet:** Two plies of ASTM D 226 Type I or Shingle-Mate[®] Roof Deck Protection OR one or more plies of ASTM D 226 Type II, Deck-Armor[™] Premium Breathable Roof Deck Protection, FeltBuster[®] High-Traction Synthetic Roofing Felt, or Tiger Paw[™] Roof Deck Protection with a minimum 4" side lap and a 6" end lap mechanically fastened to the deck with approved nails and tin caps 6" o.c. at the laps and four staggered rows 12" o.c. in the field of the roll.
- If roof is exposed to rain/snow, tape all end and side laps with approved butyl adhesive based seam/cover tape or an approved waterproof cloth duct tape (follow the tape's manufacturer's installation instructions). Always apply tape over all fasteners at the center of the roll or the end laps to help prevent rain or snow from entering at the fasteners.
- Membrane:** One or more plies of StormGuard[®] Film Surfaced Leak Barrier membrane with a minimum 4" side lap and 6" end lap. Place the first course of membrane parallel to the eave, rolling the membrane to obtain maximum contact. Remove the release membrane as the membrane is applied.
- Surfacing:** Approved for Metal roofing, Slate, and Asphalt Shingle assemblies.



LIMITATIONS:

1. Fire classification is not part of this acceptance.
2. WeatherWatch® Mineral Surfaced Leak Barrier, StormGuard® Film Surfaced Leak Barrier, Liberty™ SBS Self-Adhering Base/Ply Sheet, Liberty™ SA Glass Cap Sheet, Shingle-Mate® Roof Deck Protection, Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® High-Traction Synthetic Roofing Felt, and Tiger Paw™ Roof Deck Protection shall not be used as roof tile underlayment.
3. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code. WeatherWatch® Mineral Surfaced Leak Barrier, StormGuard® Film Surfaced Leak Barrier, Liberty™ SBS Self-Adhering Base/Ply Sheet, Liberty™ SA Glass Cap Sheet, Shingle-Mate® Roof Deck Protection, Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® High-Traction Synthetic Roofing Felt, and Tiger Paw™ Roof Deck Protection shall be installed in strict compliance with applicable Building Code.
4. WeatherWatch® Mineral Surfaced Leak Barrier, StormGuard® Film Surfaced Leak Barrier, Liberty™ SBS Self-Adhering Base/Ply Sheet, Liberty™ SA Glass Cap Sheet, Shingle-Mate® Roof Deck Protection, Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® High-Traction Synthetic Roofing Felt, and Tiger Paw™ Roof Deck Protection membranes shall be applied to a smooth, clean and dry surface with deck free of irregularities.
5. WeatherWatch® Mineral Surfaced Leak Barrier, StormGuard® Film Surfaced Leak Barrier, Liberty™ SBS Self-Adhering Base/Ply Sheet, Liberty™ SA Glass Cap Sheet, Shingle-Mate® Roof Deck Protection, Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® High-Traction Synthetic Roofing Felt, and Tiger Paw™ Roof Deck Protection membranes shall not be applied over an existing roof membrane.
6. WeatherWatch® Mineral Surfaced Leak Barrier, StormGuard® Film Surfaced Leak Barrier, Liberty™ SBS Self-Adhering Base/Ply Sheet, Liberty™ SA Glass Cap Sheet, Shingle-Mate® Roof Deck Protection, Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® High-Traction Synthetic Roofing Felt, and Tiger Paw™ Roof Deck Protection shall not be left exposed as a temporary roof for longer than 30 days of application.
7. WeatherWatch® Mineral Surfaced Leak Barrier, StormGuard® Film Surfaced Leak Barrier, Liberty™ SBS Self-Adhering Base/Ply Sheet, Liberty™ SA Glass Cap Sheet, Shingle-Mate® Roof Deck Protection, Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® High-Traction Synthetic Roofing Felt, and Tiger Paw™ Roof Deck Protection may be used with any approved roof covering Notice of Acceptance listing WeatherWatch® Mineral Surfaced Leak Barrier, StormGuard® Film Surfaced Leak Barrier, Liberty™ SBS Self-Adhering Base/Ply Sheet, Liberty™ SA Glass Cap Sheet, Shingle-Mate® Roof Deck Protection, Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® High-Traction Synthetic Roofing Felt, and Tiger Paw™ Roof Deck Protection as a component part of an assembly in the Notice of Acceptance. If WeatherWatch® Mineral Surfaced Leak Barrier, StormGuard® Film Surfaced Leak Barrier, Liberty™ SBS Self-Adhering Base/Ply Sheet, Liberty™ SA Glass Cap Sheet, Shingle-Mate® Roof Deck Protection, Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® High-Traction Synthetic Roofing Felt and Tiger Paw™ Roof Deck Protection are not listed; a request may be made to the Authority Having Jurisdiction (AHJ) or the Miami-Dade County Product Control Department for approval provided that appropriate documentation is provided to detail compatibility of the products, wind uplift resistance, and fire testing results.
8. All nails in the deck shall be carefully checked for protruding heads. Re-fasten any loose decking panels. Sweep the deck thoroughly to remove any dust and debris prior to application. Install when temperatures are 45° F and rising.
9. When applying the membrane in the valley, start at the low point and work to the high point, rolling the membrane from the center outward in both directions.



LIMITATIONS:

10. Roll or broom the entire membrane surface so as to have 100% contact with the surface, giving special attention to overlap areas.
11. Flash vent pipes, stacks, chimneys and penetrations in compliance with Roof Assembly current Product Control Notice of Acceptance and applicable Building Code.
12. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.
13. All membranes or packaging shall bear the imprint or identifiable marking of the manufacturer's name or logo, city and state of manufacturing facility, and the following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade County Product Control Seal as shown below.



END OF THIS ACCEPTANCE



NOA No.: 18-0119.15
Expiration Date: 02/22/23
Approval Date: 02/22/18
Page 10 of 10



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Product Approval
USER: Public User

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OFFICE OF THE SECRETARY

FL #	FL6267-R14												
Application Type	Revision												
Code Version	2017												
Application Status	Approved												
Comments													
Archived	<input type="checkbox"/>												
Product Manufacturer	GAF												
Address/Phone/Email	1 Campus Drive Parsippany, NJ 07054 (800) 766-3411 mstieh@gaf.com												
Authorized Signature	Robert Nieminen lindarelth@trinityerd.com												
Technical Representative	William Broussard												
Address/Phone/Email	1 Campus Drive Parsippany, NJ 07054 (800) 766-3411 TechnicalQuestionsGAF@gaf.com												
Quality Assurance Representative													
Address/Phone/Email													
Category	Roofing												
Subcategory	Roofing Accessories that are an Integral Part of the Roofing System												
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> Evaluation Report - Hardcopy Received												
Florida Engineer or Architect Name who developed the Evaluation Report	Robert Nieminen												
Florida License	PE-59166												
Quality Assurance Entity	UL LLC												
Quality Assurance Contract Expiration Date	03/23/2019												
Validated By	John W. Knezevich, PE <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received												
Certificate of Independence	FL6267 R14 COI 2017 01 COI Nieminen.pdf												
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th>Standard</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>ASTM E330</td> <td>2002</td> </tr> <tr> <td>ASTM G155</td> <td>2005</td> </tr> <tr> <td>TAS 100(A)</td> <td>1995</td> </tr> <tr> <td>TAS 110</td> <td>2000</td> </tr> <tr> <td>TAS 114, Appendix E</td> <td>1995</td> </tr> </tbody> </table>	Standard	Year	ASTM E330	2002	ASTM G155	2005	TAS 100(A)	1995	TAS 110	2000	TAS 114, Appendix E	1995
Standard	Year												
ASTM E330	2002												
ASTM G155	2005												
TAS 100(A)	1995												
TAS 110	2000												
TAS 114, Appendix E	1995												
Equivalence of Product Standards Certified By													
Sections from the Code													



EXTERIOR RESEARCH & DESIGN, LLC.

Certificate of Authorization #9503
353 CHRISTIAN STREET, UNIT #13
OXFORD, CT 06478
(203) 262-9245

EVALUATION REPORT

GAF

1 Campus Drive
Parsippany, NJ 07054
(800) 766-3411

Evaluation Report 01506.02.06-R14

FL6267-R14

Date of Issuance: 02/28/2006

Revision 14: 09/25/2017

SCOPE:

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **6th Edition (2017) Florida Building Code** sections referenced herein.

DESCRIPTION: GAF Roof Ventilation Products

LABELING: Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. if the product changes or the referenced Quality Assurance documentation changes. Trinity|ERD requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Evaluation Report number preceded by the words "Trinity|ERD Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

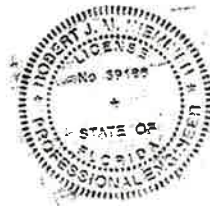
INSPECTION: Upon request, a copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 12.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 09/25/2017. This does not serve as an electronically signed document. Signed, sealed hardcopies have been transmitted to the Product Approval Administrator and to the named client

CERTIFICATION OF INDEPENDENCE:

1. Trinity|ERD does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. Trinity|ERD is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING COMPONENT EVALUATION:
1. SCOPE:
Product Category: Roofing

Sub-Category: Roofing Accessories that are an Integral Part of the Roofing System

Compliance Statement: GAF Roof Ventilation Products, as produced by GAF, have demonstrated compliance with the following sections of the 6th Edition (2017) Florida Building Code through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

<u>Section</u>	<u>Property</u>	<u>Standard</u>	<u>Year</u>
1504.3	Wind	ASTM E330	2002
1506.5 / 1517.5.1	Corrosion Resistance (of nails)	TAS 114, Appendix E	1995
1523.6.5.2.13	Wind Driven Rain	TAS 100(A)	1995
1523.6.5.2.13.1	Physical Properties	TAS 110	2000
2615.2	Weatherometer	ASTM G155	2005

3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
ATI (TST 1558)	Physical Properties	01-49035.01	03/02/2004
ATI (TST 1558)	Wind Driven Rain	01-44964.01	01/15/2004
ATI (TST 1558)	Wind Driven Rain	60172.01-122-18	10/07/2005
ATI (TST 1558)	Physical Properties	59665.02-106-31	09/16/2005
ATI (TST 1558)	Wind Driven Rain	84608.01-106-18	11/12/2008
ATI (TST 1558)	Wind Driven Rain	A5250.01-109-18	02/18/2011
ATI (TST 1558)	Wind Uplift	87074.01-109-44	12/03/2008
ATI (TST 1558)	Wind Uplift	C2396.01-109-44	11/05/2012
ATI (TST 1558)	Wind Uplift	D1957.01-109-44	03/04/2014
ATI (TST 1558)	Wind Uplift	E0818.01-109-44	09/23/2014
ATI (TST 1558)	Physical Properties	D2702.01-106-18	06/30/2014
ATI (TST 1558)	Wind Uplift	E6744.01-109-44	04/30/2015
ATI (TST 1558)	Wind Driven Rain	G2331.01-109-44	01/10/2017
ATI (TST 1558)	Wind Driven Rain	G4123.01-109-18	01/10/2017
ATI (TST 1558)	Wind Uplift	G4123.02-109-44	01/10/2017
PRI (TST 5878)	Weatherometer	HBP-007-02-01	06/24/2004
PRI (TST 5878)	Physical Properties	HBP-002-02-01	06/06/2001
PRI (TST 5878)	Wind Driven Rain	HBP-01-02-01	11/02/2000
PRI (TST 5878)	Wind Driven Rain	BRY-021-02-01	12/31/2003
PRI (TST 5878)	Physical Properties	BRY-025-02-01	09/17/2004
PRI (TST 5878)	Physical Properties	GAF-138-02-06	02/09/2007
PRI (TST 5878)	Wind Driven Rain	GAF-138-02-04	02/09/2007
PRI (TST 5878)	Wind Driven Rain	GAF-310-02-01	07/07/2011
ETC Labs (TST 2411)	Physical Properties	ETC-01-718-10379.0	01/16/2000
ETC Labs (TST 2411)	Physical Properties	ETC-03-718-14602.0	01/20/2004
ETC Labs (TST 2411)	Physical Properties	ETC-07-718-19959.0	09/27/2007
Miami-Dade (CER 1592)	Various	Various NOAs	Current
Miami-Dade (CER 1592)	Corrosion Resistance (of nails)	Certification L 17-0606.01	06/26/2017
Miami-Dade (CER 1592)	Corrosion Resistance (of nails)	Certification L 17-0821.08	09/25/2017
Miami-Dade (CER 1592)	Corrosion Resistance (of nails)	Certification L 15-0421.09	05/07/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R15072, GA1	03/23/2016
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R15072, GA2	04/15/2016
UL, LLC. (QUA 9625)	Quality Control	Service Confirmation, R15072, NC	06/08/2017

4. PRODUCT DESCRIPTION:

- 4.1 **Cobra® Exhaust Vent** is a low-profile attic ridge vent of mesh-construction for use in shingle roof systems. The product measures 10½-inch wide supplied in 20 and 50 ft long rolls, and is supplied with corrosion resistant 1¾-inch coil nails (nail gun version) or 2½-inch Smart Nails™ (hand nail version). **Cobra® Exhaust Vent** has a published net free ventilation area (NFVA) of 14.1 in² / lineal foot for nail gun version and 16.9 in² / lineal foot for hand nail version.
- 4.2 **Cobra® Rigid Vent 3™** is a plastic, low-profile attic ridge vent for use in shingle roof systems with 12-inch width ridge caps. The product measures 13-13/16-inch wide supplied in 48-inch long sections, and is supplied with 3-inch corrosion resistant ring shank nails. **Cobra® Rigid Vent 3™** has a published net free ventilation area (NFVA) of 18 in² / lineal foot.
- 4.3 **Cobra® Rigid Vent 3™ - 9"** is a plastic, low-profile attic ridge vent for use in shingle roof systems with 10-inch width ridge caps. The product measures 11½-inch wide supplied in 48-inch long sections, and is supplied with 3-inch corrosion resistant ring shank nails. **Cobra® Rigid Vent 3™ - 9"** has a published net free ventilation area (NFVA) of 18 in² / lineal foot.
- 4.4 **Cobra® Snow Country™** is a plastic, low-profile attic ridge vent with filter for use in shingle roof systems. The product measures 13-13/16-inch wide supplied in 48-inch long sections. **Cobra® Snow Country™** has a published net free ventilation area (NFVA) of 18 in² / lineal foot.
- 4.5 **Cobra® Snow Country Advanced™** is a plastic, low-profile attic ridge vent with filter for use in shingle roof systems with 12-inch width ridge caps. The product measures 13-13/16-inch wide supplied in 48-inch long sections, and is supplied with 3-inch corrosion resistant ring shank nails. **Cobra® Snow Country Advanced™** has a published net free ventilation area (NFVA) of 18 in² / lineal foot.
- 4.6 **Cobra® Snow Country Advanced™ - 9"** is a plastic, low-profile attic ridge vent with filter for use in shingle roof systems with 10-inch width ridge caps. The product measures 11½-inch wide supplied in 48-inch long sections, and is supplied with 3-inch corrosion resistant ring shank nails. **Cobra® Snow Country Advanced™ - 9"** has a published net free ventilation area (NFVA) of 18 in² / lineal foot.
- 4.7 **Cobra® RidgeRunner®** is a polypropylene plastic, low-profile attic ridge vent for use in shingle roof systems. The product measures 11½-inch wide supplied in 20 ft long rolls, and is supplied with corrosion resistant 1¾-inch coil nails. **Cobra® RidgeRunner®** has a published net free ventilation area (NFVA) of 12.5 in² / lineal foot.
- 4.8 **TruSlate® Ridge Vent** is a plastic, low-profile attic ridge vent for use in TruSlate® roof systems. The product measures 11.4-inch wide supplied in 48-inch long sections. **TruSlate® Ridge Vent** has a published net free ventilation area (NFVA) of 20 in² / lineal foot.
- 4.9 **Cobra® Hip Vent** is a plastic, low-profile attic hip vent with filter for use in shingle roof systems. The product, only for use on hips, measures nominal 11.4-inch wide supplied in 48-inch long sections, and is supplied with corrosion resistant 1¾-inch coil nails. **Cobra® Hip Vent** has a published net free ventilation area (NFVA) of 9 in² / lineal foot.
- 4.10 **Cobra® IntakePro™ Rooftop Intake Vent** is constructed from a woven plastic material being pressed to form the molded shape. A woven fabric material is utilized on the top, bottom and front, below the vent channel of the mold. The vent is configured into a roll-out form. **Cobra® IntakePro™ Rooftop Intake Vent** has a published net free ventilation area (NFVA) of 9 in² / lineal foot.

5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use in FBC HVHZ jurisdictions.

5.3 **Minimum Roof Slopes:**

Product	Minimum Slope
Cobra® Exhaust Vent	2:12
Cobra® Rigid Vent 3™	3:12
Cobra® Rigid Vent 3™ - 9"	3:12
Cobra® Snow Country™	3:12
Cobra® Snow Country Advanced™	3:12
Cobra® Snow Country Advanced™ - 9"	3:12
Cobra® RidgeRunner®	3:12
TruSlate® Ridge Vent	5:12
Cobra® Hip Vent	Min. 3:12 to max. 12:12
Cobra® IntakePro™ Rooftop Intake Vent	4:12

5.4 Unless otherwise determined through use of performance levels in Section 5.5, the maximum mean roof height for **Cobra® Exhaust Vent, Cobra® Rigid Vent 3, Cobra® Rigid Vent 3 – 9”, Cobra® Snow Country™, Cobra® Snow Country Advanced™, Cobra® Snow Country Advanced™ – 9”, Cobra® RidgeRunner®, TruSlate® Ridge Vent, Cobra® Hip Vent and Cobra® IntakePro™ Rooftop Intake Vent** shall be 33 ft.

5.5 **Maximum Allowable Design Pressures:** The following performance levels may be utilized for projects where the maximum mean roof height exceeds 33 ft. The Allowable Design Pressure shall meet or exceed critical design pressure determined by a qualified design professional in accordance with **FBC Chapter 16**. No rational analysis is permitted.

Substrate:	Product	Allowable Design Pressure (psf)
Min. 7/16-inch plywood	Cobra® Exhaust Vent (nail gun version)	-150
Min. 7/16-inch plywood	Cobra® Exhaust Vent (hand nail version)	-180
Min. 7/16-inch plywood	Cobra® Rigid Vent 3™, Rigid Vent 3™ - 9”, Snow Country™, Snow Country Advanced™ and Snow Country Advanced™ - 9”	-215
Min. 7/16-inch OSB or plywood	Cobra® RidgeRunner®	-180
Min. 7/16-inch plywood	TruSlate® Ridge Vent	-190
Min. 7/16-inch plywood	Cobra® Hip Vent	-205
Min. 7/16-inch plywood	Cobra® IntakePro™ Rooftop Intake Vent	-175

5.5.1 Allowable Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **FBC 1504.9** has already been applied). Refer to **FBC 1609** for determination of design wind loads.

5.6 Installation shall result in minimum net free ventilation area requirements set forth in **FBC Sections 1203.2**. When more than one level of roof ridge existing over a single attic space, use ridge vents only at the high ridge.

6. INSTALLATION:

6.1 **GAF Roof Ventilation Products** shall be installed in accordance with **GAF** published installation requirements subject to the Limitations set forth in Section 5 herein and the specifics noted below.

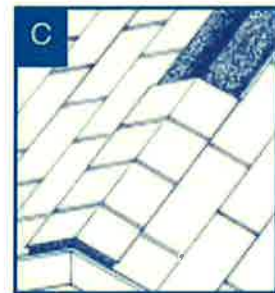
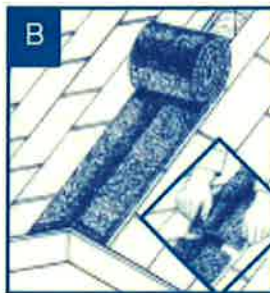
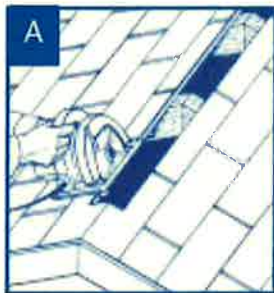
6.2 COBRA® EXHAUST VENT:

6.2.1 Chalk a cut-line 1-inch off each side of the ridge and cut a slot along the apex of the roof measuring 2-inch (for truss construction) or 3½-inch (for ridge pole construction). The slot should terminate 6-inches from each end and 12-inches from hip intersections or chimneys. Cut only the sheathing; do not cut trusses. Figure A.

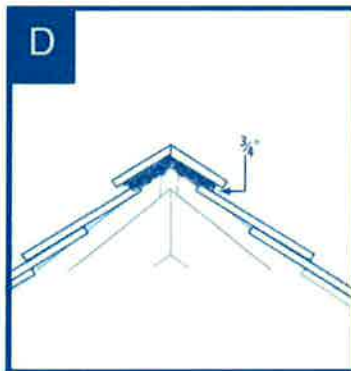
6.2.2 Unroll the vent along the entire length of the ridge, covering uncut 6-inch sheathing area on both ends. Shorter lengths can be joined by caulking and butting the ends. Figure B.

6.2.3 Apply a bead of polyurethane roof sealant to the underside of the entire perimeter of the vent and nail with min. 2½-inch galvanized roofing nails at each corner and 10-inch o.c. Do not use excessive roof cement, as it may result in shingle blistering.

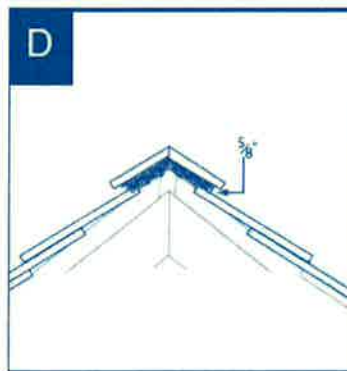
6.2.4 Apply a bead of polyurethane roof sealant in the shape of a “C” to the underside of the entire perimeter of the cap shingles, and install cap shingles directly over the vent using Smart Nails™ or 1¼-inch corrosion resistant coil nails (supplied with the vent). Figure C. Do not use excessive roof cement, as it may result in shingle blistering.



6.2.5 **Cobra® Exhaust Vent (hand nail version)** and **Cobra® Exhaust Vent (nail gun version)** have a ¾-inch or 5/8-inch nominal thickness, respectively, to facilitate ventilation. Care shall be taken not to crush or compact the product during installation. Figure D.



Hand-Nail Version

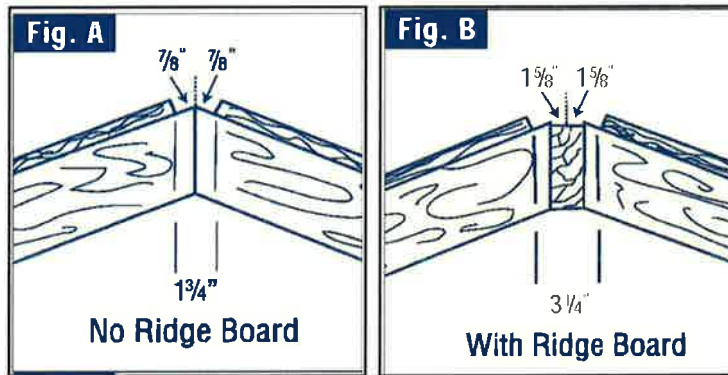


Nail Gun Version

6.3 COBRA® RIGID VENT 3™, RIGID VENT 3™ - 9", SNOW COUNTRY™, SNOW COUNTRY ADVANCED™ AND SNOW COUNTRY ADVANCED™ - 9":

6.3.1 Mark-off and cut the slot opening as follows, ensuring that the ends of the opening stop at least 6-inch from any end walls and at least 12-inch from hip and ridge intersections or chimneys.

- **No Ridge Board:** Cut a 7/8-inch opening on each side of the ridge (Figure A).
- **With Ridge Board:** Cut a 1-5/8-inch opening on each side of the ridge (Figure B).



6.3.2 **Sealant:** Apply a bead of silicone caulking or roof cement to the underside of the outer baffle along both edges and at exposed ends, ensuring the outside edges where the vent meets the shingles are sealed with the caulk or flashing cement.

6.3.3 **Vent Placement:** Starting at one end of the slot, place, center and conform the Cobra® rigid vent over the slot with the vent firmly against the roof surface, ensuring the vent extends past the slot opening by at least 6-inch.

6.3.4 **Fasteners:** For Cobra® Rigid Vent 3™, Cobra® Rigid Vent 3™ - 9", Cobra® Snow Country Advanced™ and Cobra® Snow Country Advanced™ - 9" only, use the 3-inch corrosion resistant ring shank nails (included). For Cobra® Snow Country™, use corrosion resistant nails at least 3-inch or longer. Nails must always penetrate through plywood decks or at least 3/4-inch into wood planks. NOTE: GAF recommends 3-inch corrosion resistant ring shank nails for increased uplift resistance.

6.3.5 **Spacing:** Attach the vent section through the pre-molded nailing holes located at 3, 12, 24, 36 and 45-inch from the start of each 48-inch vent piece.

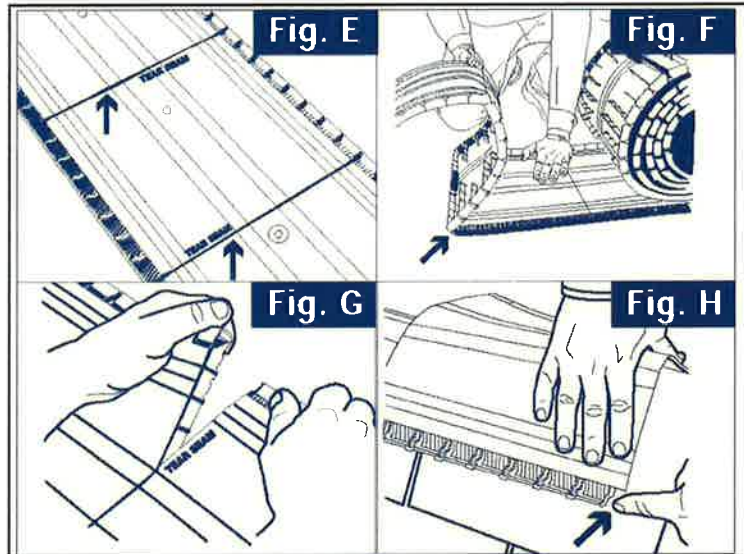
6.3.6 **Joints:** Apply the subsequent Cobra® rigid vent sections over the length of the ridge using the overlap/underlap tabs.

6.3.7 **Ridge Shingles:** Install ridge shingles in accordance with shingle manufacturer's published installation instructions, using corrosion resistant nails detailed in 6.3.4. A nail line is inscribed on top of the Cobra® rigid vent to serve as a guide.

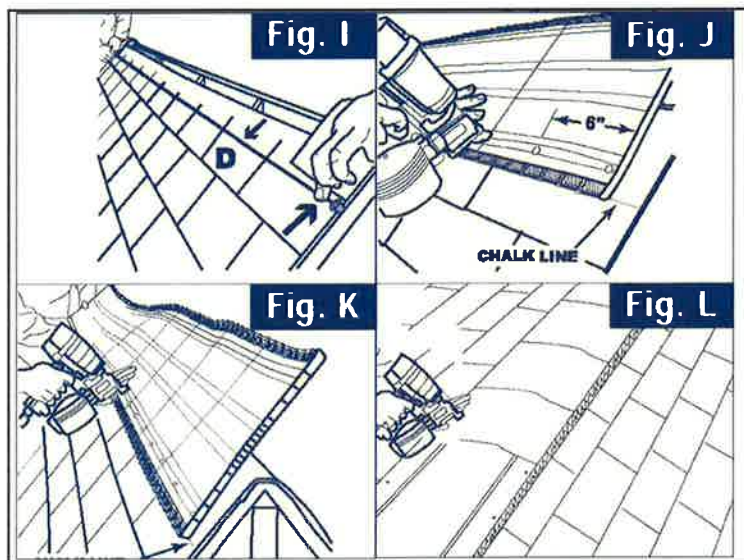
6.4 COBRA® RIDGERUNNER®

6.4.1 Cut slot per 6.3.1.

6.4.2 Tear a 1-foot section to be used as a template for laying the vent out (Figure E-G) and center the template/locator over the ridge cap shingles at the beginning of the vent slot. Note the location of the baffle (Figure H). Make sure to do this at both ends of the installation.



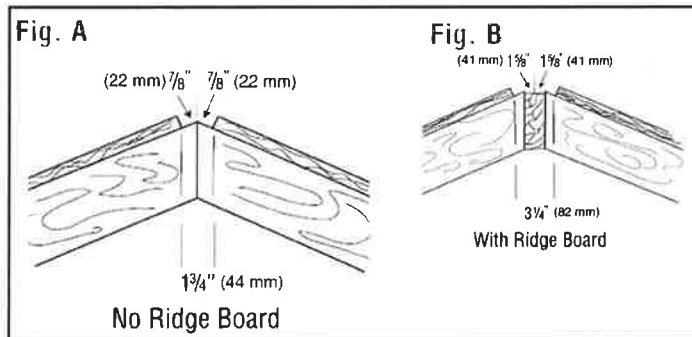
6.4.3 Measure the distance from the edge of the roof slot to the exterior baffle (D). Establish a chalk line along one side of the ridge (Figure I). Unroll the vent and use the included 1-3/4-inch pneumatic corrosion resistant roofing nails to attach the first side of the ridge vent with the exterior of the baffle aligned with the chalk line (Figure J). Proceed with using the 1' interval EasyTear™ system to custom size the vent to the appropriate length. If the EasyTear™ system can not be utilized, use a utility knife to size the vent. Nail gun targets are embossed on the part as a guide for property attaching vent to the roof. The vent should be fastened on 6-inch centers (Figure K).



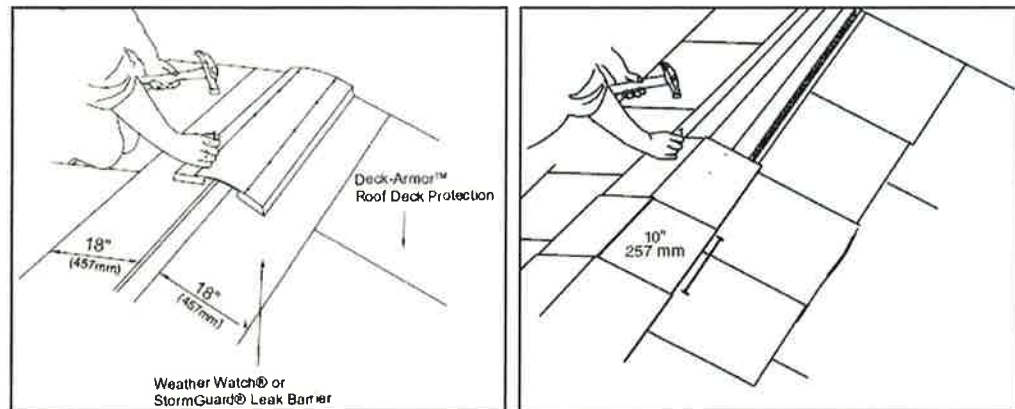
- 6.4.4 **NOTE:** When fastening the vent and cap shingles, be sure that the included 1 3/4-inch corrosion resistant coil nails completely penetrate plywood or provide at least 3/4-inch penetration into wood planks. In the case they do not, you must use alternate corrosion resistant nails that provide the required penetration. Proceed with attaching the other side of the vent. When beginning to nail down the second side, do NOT begin at the end; begin between the first and second one-foot sections and then return to fasten the first one-foot section. This will allow for proper fit.
- 6.4.5 Install ridge shingles in accordance with shingle manufacturer's published installation instructions, using the nail-lines on top of the ridge vent for proper lapping.

6.5 TRUSLATE® RIDGE VENT:

- 6.5.1 DO NOT use on hips.
- 6.5.2 Intall **TruSlate® Ridge Vent** before installing the field slates.
- 6.5.3 After determining the total length of **TruSlate® Ridge Vent** required (for proper ventilation), determine the necessary slot opening. Mark-off and cut the slot opening, ensuring the ends of the opening stop at least 6-inch from any end walls and at least 12-inch from hip and ridge intersections or chimneys.
- Roofs without a ridge board: Cut a 7/8-inch opening along the ridge on each side (Figure A).
- Roofs with a ridge board: Cut a 1-5/8-inch opening along the ridge on each side (Figure B).



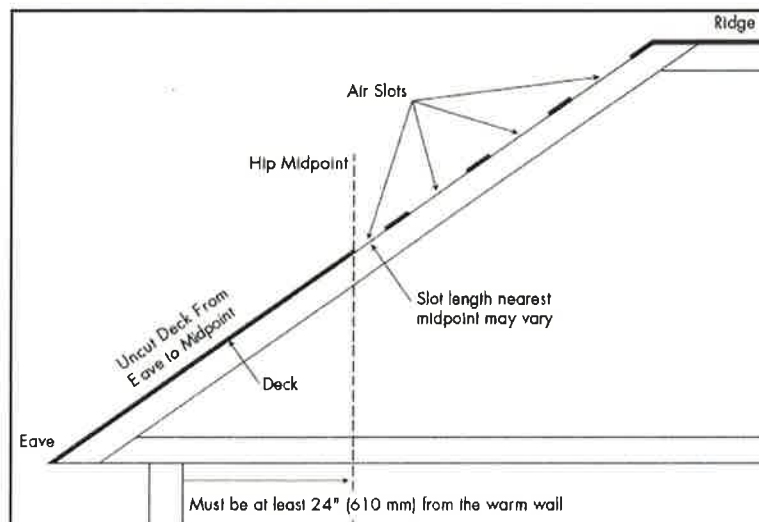
- 6.5.4 Install an 18-inch wide section of ASTM D1970 self-adhering leak barrier (holding Florida Statewide Product Approval or Approved on a Local Basis) from the edge of the ridge slot extending down towards the roof deck on both side of the slot.
- 6.5.5 Place the **TruSlate® Ridge Vent** over the ridge slot, “peaked” and centered over the ridge slot, and attach using minimum 3-inch long corrosion resistant ring-shank nails through the pre-molded nail holes on the vent, located 3-inch from the ends and 9-inch o.c. Fasteners shall penetrate through plywood decks or embed minimum 3/4-inch into wood plank decks.
- 6.5.6 Continue over the length of the ridge, utilizing the male/female connectors to connect units. Ensure the finished ends include the pre-molded end caps. Cover all exposed nail heads on the vent with silicone caulk. Intall a bead of exterior grade silicone sealant at the downslope leading edges of the ridge vent, at the junction of the leading edge and the leak-barrier below.
- 6.5.7 Install the top course of TruSlate® field slates, UnderBlock™ UV & Moisture Barrier and TruSlate® trim slates in accordance with GAF published installation instructions. Intall **TruSlate® trim slates** with 10-inch exposure using minimum **1-5/8-inch long deck screws** through pre-drilled holes, through the ridge vent to engage the wood deck.



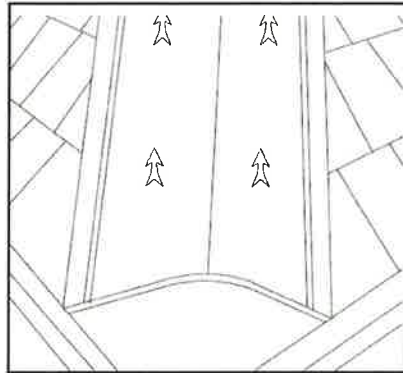
6.6 COBRA® HIP VENT

- 6.6.1 The roof deck shall consist of minimum of 7/16 inch thick plywood or OSB wood structural panels. Use only on roofs with slopes between 3:12 and 12:12. Install only on hips. Do not install Cobra® Hip Vent on ridges.
- 6.6.2 **Sequencing:** If ridge ventilation will be installed, always install the ridge vent to the end of the ridge before installing Cobra® Hip Vent.
- 6.6.3 **Hip Air Slot:** Determine the number of Cobra® Hip Vent sections needed for proper ventilation and the location for cuts in the roof hip. Cobra® Hip Vent is installed over a 2½ inch wide slot opening centered on the hip beginning at 12 inches below the top of the hip and extending 36 inches down the hip for every 4 foot section of Cobra® Hip Vent needed. Leave 12 inches of the hip uncut after each 36 inch opening, and the lowest opening must stop at the mid-point of the hip and more than 24 inches in from the exterior warm wall. Wider openings and slots below the midpoint of the hip will not improve ventilation and must be avoided. Cut away the shingles first with a roofing knife, and then cut the deck with a circular saw. The saw should be adjusted so that the rafters or trusses are not cut.

Note: The roof decking must be re-nailed to the rafter at the edge closest to the hip to compensate for the nails removed when the hip slot was cut.



- 6.6.4 **Sealant:** Seal all cut-edges of the asphalt shingles to the roof sheathing along all sides of the hip air slot openings, using a bead of ASTM C920 polyurethane sealant, to prevent water infiltration.
- 6.6.5 **Orientation:** Always install **Cobra® Hip Vent** with the "Towards Peak" arrows on the top surface of the vent pointing up towards the peak of the roof.



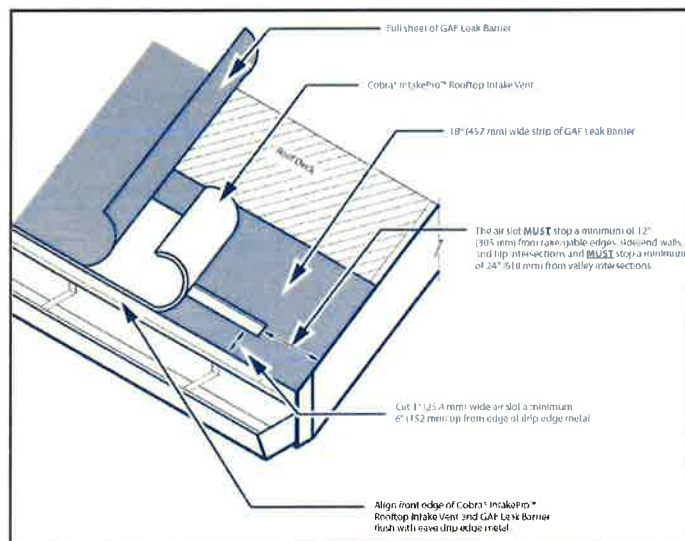
- 6.6.6 **Attachment:** **Cobra® Hip Vent** is fastened to the deck starting at the bottom of the hip and then up along the entire length of the hip (this includes un-cut portions of the hip). Fasten **Cobra® Hip Vent** to the deck with the included 1¼-inch long collated galvanized steel roofing nails, or longer corrosion resistant roofing fasteners, to achieve penetration through plywood or OSB decks or minimum ¾-inch embedment into wood planks. Attach the **Cobra® Hip Vent** section through the pre-marked 6-inch increment nail targets.
- 6.6.7 **Joints & Terminations:** Apply the subsequent **Cobra® Hip Vent** sections over the length of the hip using the overlap/underlap tabs. For roofs with ridge vents, lengths of the hip vent must be butted tightly to sections of ridge vents and install a 3 inch by 12-inch strip of self-adhering leak barrier over all junctions. For roofs without ridge vents, sections of hip vent from adjacent hip runs must be mitered together tightly where they intersect and install a 3 inch by 12-inch strip of self-adhering leak barrier over all junctions. Refer to GAF published installation instruction for details.
- 6.6.8 **Ridge Shingles:** **Cobra® Hip Vent** is then covered with ridge cap shingles and this entire assembly is nailed to the sheathing with the included 1¼-inch long collated galvanized steel roofing nails. Depending on the field and ridge cap shingles used, longer length corrosion resistant fasteners may be necessary. The ridge cap shingles are installed per the shingle manufacturer's instructions and Florida Product Approval, with a minimum of two nails per shingle and a shingle to shingle nail spacing of 8 inches on center or less. Refer to the shingle manufacturer's Florida Product Approval for ridge cap shingle fastening and sealing requirements. Do not overdrive the nails or crush/compact the product during installation.

6.7 COBRA® INTAKEPRO™ ROOFTOP INTAKE VENT

- 6.7.1 The roof deck shall consist of minimum of 7/16 inch thick plywood or OSB wood structural panels. Use only on roofs with minimum slope of 4:12. Install only on eave edges of the roof.
- 6.7.2 Determine the length of Cobra® IntakePro™ Rooftop Intake Vent sections needed for proper ventilation and the location for cuts near the roof eave edge. Install a metal drip edge at the eave of the roof. Measure up 6 and 7 inches up from the edge of the metal drip edge and strike chalk lines parallel to the eave of the roof. Cut a 1 inch wide air slot opening along the chalk lines, stopping a minimum of 12" (305 mm) from rake/gable edges, side/end walls, and hip intersections, and stopping a minimum of 24" (610 mm) from the center of valley intersections. The saw should be adjusted so that the rafters or trusses are not cut.

Note: After cutting the air slot, clear all debris blocking access into the attic space. Be sure to flatten attic insulation near the air slot to allow for proper intake airflow near the air slot. Attic baffles may be used to help prevent insulation from blocking intake airflow into the attic space.

- 6.7.3 Install a minimum 18 inch (457mm) wide FBC Approved peel-and-stick leak barrier down to the roof deck. Align peel-and-stick leak barrier flush to the edge of the roof on top of the drip edge metal. Use a sharp utility knife to cut the leak barrier, re-opening the 1 inch (25 mm) air slot that was previously cut in the deck.
- 6.7.4 Each roll of Cobra® IntakePro™ Rooftop Intake Vent comes with two pieces of end cap fabric. To begin the vent run, place one piece of end cap fabric overhanging halfway over the rake/gable edge and parallel to the eave drip edge. Fasten the fabric to the roof deck using two roofing nails, one high and one low. If necessary, a piece of FBC Approved peel-and-stick leak barrier can be used in lieu of end cap fabric.
- 6.7.5 With the pre-marked dotted nail line and GAF logo facing up toward the sky, position the vent on top of the fabric end cap and flush to the rake/gable edge and eave drip edge. The front venting face of the vent should be flush with the drip edge metal below. Using the included 1-3/4 inch (44 mm) pneumatic coil nails, fasten the vent every 6 inches (152 mm) along the pre-marked nail line and fasten every 12 inches (305 mm), approximately 1-1/2 inches (38 mm) down from the up-slope edge of the vent. Do NOT nail within 1 inch (25 mm) from the side, top, or bottom edges of the vent.
- 6.7.6 Continue installing vent toward the opposite gable/rake edge or termination point. When installing multiple rolls, adjoin the rolls by butting them tightly together. There should be no gap between adjoining sections. The vent must always extend a minimum of 12 inches (305 mm) past any air slots. Miter cut the vent at any valley and hip intersections, ensuring the vent sections are butted tightly together. For terminations at gable and rake edges, cover the end of the vent run using the included fabric end cap in the same manner as the start of the vent run.
- 6.7.7 Install FBC Approved peel-and-stick leak barrier completely covering the top of the vent and extending from the eave edge to a minimum of 24 inches (610 mm) in from the building's warm wall. The leak barrier should not overhang the vent. Install rake drip edge if necessary.



- 6.7.8 Begin installing the shingle starter course. The starter course and first course of field shingles should overhang the front edge of the Cobra® IntakePro™ Rooftop Intake Vent by 1/4 – 3/4 inches (6 – 19 mm) to provide a drip edge. Using the included 1-3/4 inch (44 mm) pneumatic coil nails, fasten the starter strip and field shingles as per manufacturer's installation instructions. Ensure the field shingles are not fastened into the open air intake slot below.



7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction in order to properly evaluate the installation of this product.

8. MANUFACTURING PLANTS:

Acworth, GA
Cumming, GA
Enka, NC

9. QUALITY ASSURANCE ENTITY:

UL, LLC. – QUA9625; (847) 664-3281

- END OF EVALUATION REPORT -

Evaluation Report FLAMCO "Off-Ridge Vent" Roof Vent

Manufacturer:
Florida Metal Products, Inc.

6940 Stuart Avenue
Jacksonville, FL 32254

for

Florida Product Approval
FL 21580.1 R1

Florida Building Code 6th Edition (2017)

Method: 2 - B

Category: Roofing

**Sub - Category: Roofing Accessories that are an Integral
Part of the Roofing System**

Product Name: "Off-Ridge Vent"
Product Description: Roof Vent
Attached To: Wood Deck

Prepared by:

James L. Buckner, P.E., SECB
Florida Professional Engineer # 31242
Florida Evaluation ANE ID: 1916
Project Manager: Diana Galloway
Report No. Report No. 17-185- ORV-ER
(Revises 16-143-ORV-ER, FL 21580.1)
Date: 9/18/17

Facsimile of digital copy signed by
James L. Buckner, P.E.
Electronically signed and sealed documents shall
comply with the provisions of FAC Rule 61G15-23.



A handwritten signature in blue ink, appearing to read "James L. Buckner".

Contents:

Evaluation Report Pages 1 – 9

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1.0 Manufacturer: Florida Metal Products, Inc. dba FLAMCO
6940 Stuart Avenue
Jacksonville, Florida 32254
(800) 634-8400
<http://flamco.com>

2.0 Manufacturing Plant: Jacksonville, Florida

3.0 Product:

3.1 Product Name: "Off-Ridge Vent"
3.2 Product Description: Roof Vent

4.0 Evaluation Scope:

4.1 Compliance with the following
Florida Building Code 6th Edition (2017)

4.2 Evaluation Method:
Florida Product Approval Rule 61G20-3.005 (2) (b)

4.3 Evaluation Classification:
Category: Roofing
Sub Category: Roofing Accessories that are an Integral part of the Roofing System

4.4 Properties Evaluated
Structural (Wind Resistance) Properties

4.5 Limits of Evaluation:
This product assembly evaluation is limited to compliance with section 4.1 to section 4.4 of this report.

5.0 Evaluated Uses:

FLAMCO "Off-Ridge Vent" is used as a roof ventilator.

6.0 Product Assembly Description:

6.1 General:

The FLAMCO "Off-Ridge Vents" are low profile, off-ridge roof vent for pitched roofs fabricated from 26 gauge, G-90 primed, galvanized steel with a galvanized steel mesh covering mechanically attached to Plywood Deck.

7.0 General Assembly as Evaluated:

Refer to section 15.0 of this report for product assembly components/materials & standards.

8.0 Support System:

(Design of support system is outside the scope of this evaluation.)

8.1 Type: Wood Deck
8.2 Description: 15/32" (min.) or greater plywood, or
Wood plank deck (based on minimum density/specific gravity of 0.42)

9.0 Slope:

Minimum slope shall be 2:12. (and in compliance with FBC Chapter 15 based on the type of roof covering, applicable code sections and in accordance with manufacturer's recommendations.)

10.0 Performance:

10.1 Wind Resistance:

Table A Allowable Loads	
Design Uplift Pressure	-46 PSF

Notes:

1. Allowable design pressure(s) for allowable stress design (ASD) with a margin of safety of 2 to 1.

11.0 Performance Standard:

The following test protocols were performed to demonstrate compliance with the intent of the code:

- 11.1 **ASTM E330-02** – *Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors and by Uniform Static Air Pressure Difference*

12.0 Code Compliance:

- 12.1 The product assembly described herein has demonstrated compliance with the Florida Building Code 6th Edition (2017) Section 1708.2.

13.0 Limitations and Conditions of Use:

- 13.1 Design of support system is outside the scope of this report. Support shall be structural framing members complying with the code and shall be designed by others.
- 13.2 Scope of "Limitations and Conditions of Use" for this evaluation:
This evaluation report for "State Approval" contains technical documentation, specifications and installation method(s) which include "Limitations and Conditions of Use" throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under "State Approval".
- 13.3 Option for application outside "Limitations and Conditions of Use"
Rule 61G20-3.005(1)(e) allows engineering analysis for "project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code". Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others.
- 13.4 This report is a building code product evaluation per FLPE rule (FAC) 61G15-36 to comply with Florida product approval rule (FAC) 61G20-3. This evaluation report is part of the Florida Building Commission approval for the listed code related criteria. This report by James Buckner, P.E. and CBUG Engineering is not a design certification of code compliance construction submittal documentation, per FBC section 107, for any individual structure, site specific or permit design.
- 13.5 Structural loads shall comply with the design provisions of the FBC 6th Edition (2017), Chapter 16, Section 1609.
- 13.6 All metal components and fasteners shall be corrosion resistant in accordance with FBC, including but limited to Sections 1504.3.2, 1506.6 and 1507.4.4.
- 13.7 Refer to applicable building code section for ventilation requirements.
- 13.8 Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.
- 13.9 This report does not evaluate the use of this product assembly as described in this report for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)

14.0 Quality Assurance:

The manufacturer has demonstrated compliance of products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through Keystone Certifications, Inc., (FBC Organization #QUA ID:1824).

15.0 System/Components

15.1 "Off Ridge Vent"

- 15.1.1 Material: Steel
- 15.1.2 Thickness: 26 gauge (min.)
- 15.1.3 Yield Strength: 40 ksi min.
- 15.1.4 Corrosion Resistance: In compliance with FBC Section 1507.4.3:
ASTM A792 coated, or ASTM A653 G90 galvanized steel
- 15.1.5 Overall Product Dimensions ($\pm 1/4$ " nominal):
 - 15.1.5.1 Length(s): 2', 4', 6' and 8' (max.)
 - 15.1.5.2 Width: 23-1/2" (max.)
 - 15.1.5.3 Height: 4-1/2" and 8-1/2" (max.)

15.2 Fastener:

- 15.2.1 Base Fastener: Attaches Roof Vent to Deck
 - 15.2.1.1 Type: Smooth or Ring Shank Roofing Nails
 - 15.2.1.2 Size: 11 gauge \times 2" (Long)
 - 15.2.1.3 Corrosion Resistance: Per FBC Section 1506.5
 - 15.2.1.4 Standard: Per ASTM F 1667

15.3 Roof Adhesive:

- 15.3.1 Type: Standard Heavy bodied Flashing Cement
- 15.3.2 Description: Asbestos-free asphalt based roof cement
- 15.3.3 Application Size: 1/4" thick (min.)
- 15.3.4 Standard: Per ASTM D 4586 Type I

16.0 Installation Method:

(Refer to installation method at the end of this evaluation report.)

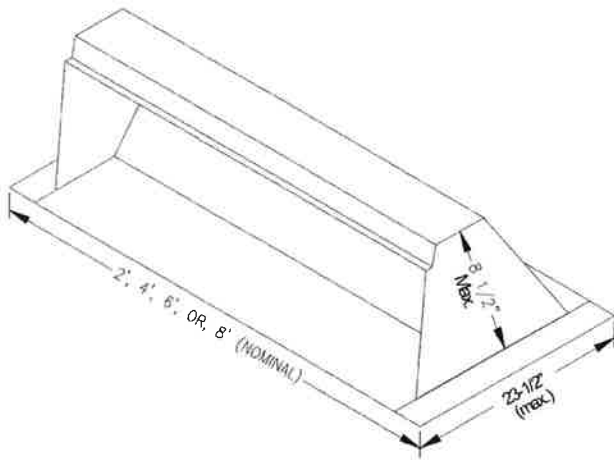
Prepare deck opening by trimming any shingles or tiles & existing nails that may interfere with ridge vent installation. Apply roof cement to the underside, back and side flanges of the ridge vent. Cement should be a 1/4" thick and extend 2" onto roof underlayment. (Install cement in compliance with manufacturer's installation guidelines.) Position vent base flange beneath loosened shingles and align with deck opening. Attach the unit side flanges to deck with fasteners per Section 15.2.1 spaced 4" o.c. and 1" from each end. Apply Roofing Cement to exposed fastener heads. Minimum fastener penetration thru bottom of support, 3/16".

The FLAMCO "Off-Ridge Vent" shall be installed in compliance with the installation method listed in this report and applicable code sections of FBC 6th Edition (2017). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

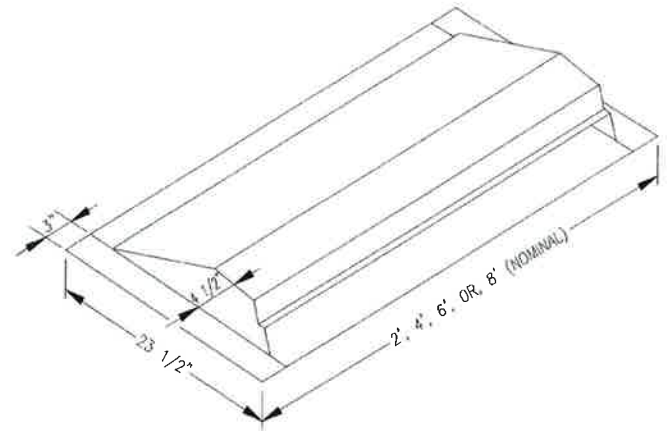
17.0 Evaluation Reference Data:

- 17.1 ASTM E330-02 Uniform Static Air Pressure Difference Test
 - By Fenestration Testing Laboratory, Inc. (FTL) (FBC Organization #TST ID: 1657)
 - Project #16-6647, Lab #9124, Dated: 11/09/16
- 17.2 Quality Assurance
 - By Keystone Certifications, Inc. (FBC Organization #: QUA 1824)
 - Licensee #440
- 17.3 Engineering Analysis
 - By James L. Buckner, P.E. @ CBUCK Engineering
 - (FBC Organization # ANE 1916)
- 17.4 Certification of Independence
 - By James L. Buckner, P.E. @ CBUCK Engineering
 - (FBC Organization # ANE 1916)

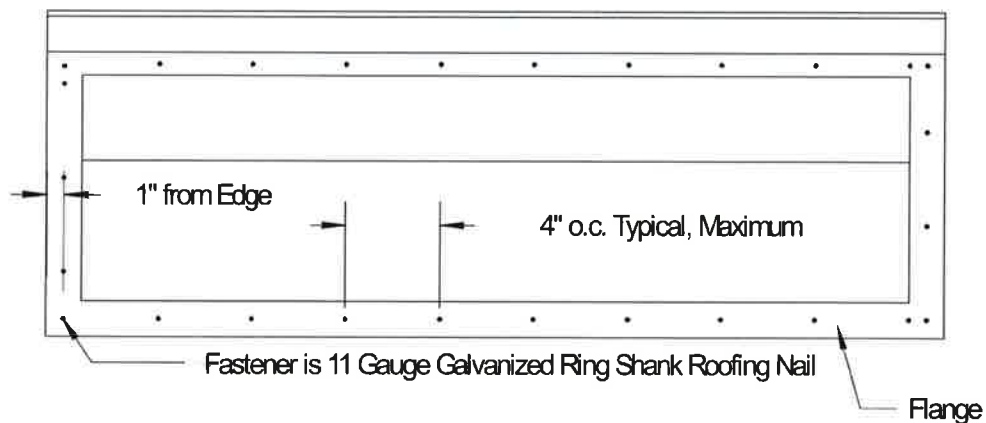
Installation Method FLAMCO "Off-Ridge Vent" Roof Vent



"Off-Ridge Vent"
(for Tile Roofs)
Isometric View



"Off-Ridge Vent"
(for Shingle Roofs)
Isometric View



Top Plan View
(Typical Fastening Pattern)
(Not to Scale)



CARROLL BRADFORD, INC.

CBC1280310 - CCC1330656

AGREEMENT SUBJECT TO INSURANCE COMPANY APPROVAL

Customer: SETH RICHARDSON Date: 7 / 23 / 2018
 Property Location: 5134 DUBAN AVE Day Phone: 407.580.8809 AM OH
 City/State: BELLE ISLE Zip: 32812 Evening Phone: _____ AM OH
 E-Mail: Seth.Richardson@kesslercollection.com HOA Approval Needed: Yes No

ROOF SPECIFICATIONS - Brand: GAF Style: Timberline HD Color: Charcoal
 Construction Type: New Construction Remove & Replace Story: 1 2 Pitch: 5/12
 Tear-Off Layers: 1 2 Peel & Stick Valley: Open Closed
 Lead Pipes: 1.5" 2" 3" 4" Underlayment: Synthetic Felt
 Ventilation: Type Off R. Qty. 2 Color BLACK Drip Edge: Color BLK
 Kitchen/Bath Vents: 4" _____ 10" _____ Color _____ Skylights: Size _____ Type _____ Qty. _____
 Replace Flat Roof: Yes No Color _____ Lumber: Size ? Type ? Qty. ?
 Solar: Description _____ Misc. ROTTED FASCIA/SOFFIT/Decking Send to Supplier
 Warranty: Standard System: Sys PLUS / 2yr Delivery Notes: GARAGE
 GUTTER SPECIFICATIONS: Size Detach and reset but may not be possible Color _____ Lifeal Feet _____ Downspouts _____
 SIDING SPECIFICATIONS: Lap Size (exposure): _____ Trim Size: _____ Finish: Smooth Woodgrain
 Special Instructions: ETHK PICS FOR FLAT ROOF. (STARTER STRIP, CELL ADJUSTER ABOUT STEP FLASHING ON RIDGE VENTS) Get one 2" PVC pipe cover. CHECK INTERIOR.
PLUS FULL SCOPE OF WORK INCLUDED IN ESTIMATE FOR CL# 149265

TERMS POLICY # P000894216

- By signing this Agreement, you authorize Carroll Bradford, Inc. to be present during the insurance adjustment and negotiate the settlement with your insurance company.
- Unless otherwise agreed in writing, your out-of-pocket costs will be limited to your insurance deductible amount. However, you must promptly pay Carroll Bradford, Inc. all amounts you receive from your insurance company. If you desire material upgrades or other work done on your property, you will incur additional out-of-pocket expenses.
- This Agreement is not valid or binding on any party unless and until it is signed by both you and Carroll Bradford, Inc. Once signed by you and Carroll Bradford, Inc., Carroll Bradford, Inc. will be awarded with the job described above and the scope and price of the work will be set forth in the insurance adjuster's summary.
- Your signature below provides your agreement to all the terms and conditions set forth on the front and back of this Agreement. Please carefully read the entire front and back of this Agreement.

Signature (Customer) [Signature] Date 7 / 23 / 2018
 Signature (Carroll Bradford Rep) [Signature] Date 7 / 23 / 2018
 First Check: \$ 19,169.81 7 / 23 /
 Check# 361933 + Bring homeowner back for 12K
 Balance Due: \$ _____
 Check# _____
 Agreed Price: \$ 20,169.81
 Plus additional supplements & permit fees paid by insurance company



**STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**

**CONSTRUCTION INDUSTRY LICENSING BOARD
2601 BLAIR STONE ROAD
TALLAHASSEE FL 32399-0783**

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**MENKE, JONATHAN DAVID
CARROLL BRADFORD INCORPORATED
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**STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND
PROFESSIONAL REGULATION**

CBC1260310 ISSUED: 08/25/2016

**CERTIFIED BUILDING CONTRACTOR
MENKE, JONATHAN DAVID
CARROLL BRADFORD INCORPORATED**

IS CERTIFIED under the provisions of Ch 489 FS
Expiration date AUG 31 2018 L1608250001/05

DETACH HERE

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY

**STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD**

LICENSE NUMBER	
CBC1260310	

**The BUILDING CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2018**



**MENKE, JONATHAN DAVID
CARROLL BRADFORD INCORPORATED
4776 NEW BROAD STREET
SUITE 201
ORLANDO FL 32814**



ISSUED: 08/25/2016

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SEQ # L1608250001786



**STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**

**CONSTRUCTION INDUSTRY LICENSING BOARD
2601 BLAIR STONE ROAD
TALLAHASSEE FL 32399-0783**

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**MENKE, JONATHAN DAVID
CARROLL BRADFORD INCORPORATED
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**STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND
PROFESSIONAL REGULATION**

CCC1330656 ISSUED: 08/25/2016

**CERTIFIED ROOFING CONTRACTOR
MENKE, JONATHAN DAVID
CARROLL BRADFORD INCORPORATED**

IS CERTIFIED under the provisions of Ch 489 FS
Expiration date: AUG 31, 2018 L1608250001911

DETACH HERE

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY

**STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD**

LICENSE NUMBER
CCC1330656

The ROOFING CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS
Expiration date: AUG 31, 2018



**MENKE, JONATHAN DAVID
CARROLL BRADFORD INCORPORATED
4776 NEW BROAD STREET
SUITE 201
ORLANDO FL 32814**



ISSUED: 08/25/2016

DISPLAY AS REQUIRED BY LAW

SEQ # L1608250001911

Scott Randolph, Tax Collector Local Business Tax Receipt Orange County, Florida

This local business tax receipt is in addition to and not in lieu of any other tax required by law or municipal ordinance. Businesses are subject to regulation of zoning, health and other lawful authorities. This receipt is valid from October 1 through September 30 of receipt year. Delinquent penalty is added October 1.

1801 BUILDING CONTRACTOR 2017 EMPLOYEE : 5000 BUSINESS OFFICE 1801-1152597 EMPLOYEE :

TOTAL TAX \$60.00
 PREVIOUSLY PAID \$60.00
 TOTAL DUE \$0.00

BARNETT STEPHEN C
 MENKE JONATHAN DAVID (QUALIFIER)
 CARROLL BRADFORD INC
 4776 NEW BROAD ST #201
 ORLANDO FL 32814

4776 NEW BROAD ST #201
 A - ORLANDO, 32814

PAID: \$60.00 0098-00809413 9/21/2017

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This receipt is official when validated by the Tax Collector.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

2/8/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Blackadar Insurance Agency, Inc. 1436 N Ronald Reagan Blvd Longwood FL 32750	CONTACT NAME: Ella Nulph PHONE (A/C, No, Ext): 407-831-3832 E-MAIL ADDRESS: ella@blackadar.com	FAX (A/C, No): 407-830-4681
	INSURER(S) AFFORDING COVERAGE	
INSURED CAROBRA-01 Carroll Bradford, Inc. 4776 New Broad Street, Suite 201 Orlando FL 32814	INSURER A : Auto-Owners Insurance NAIC # 18988	
	INSURER B : Southern-Owners Insurance Co NAIC # 10190	
	INSURER C : QBE Specialty Insurance Co	
	INSURER D :	
	INSURER E :	
INSURER F :		

COVERAGES **CERTIFICATE NUMBER:** 1969700593 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC			72202001	2/12/2018	2/12/2019	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			5062492500	2/12/2018	2/12/2019	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			5062493500	2/12/2018	2/12/2019	EACH OCCURRENCE \$ 2,000,000 AGGREGATE \$ 2,000,000 \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			QWC3000874	2/17/2018	2/17/2019	<input type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 Certificate Holder is included as Additional Insured including Products & completed operations, coverage is primary non-contributory and Blanket Waiver of Subrogation applies with regard to General Liability when required by written contract (endorsement 55373). Blanket Waiver of Subrogation applies to the Workers' Compensation when required by written contract.

CERTIFICATE HOLDER City of Belle Isle 1600 Nela Avenue Belle Isle FL 32809	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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Searches

Sales Search

Results

Property Record Card

My Favorites

Sign up for e-Notify...

5134 Duban Ave < 17-23-30-4384-02-640 >

Names) Richardson Seth B Richardson Jenny L	Physical Street Address 5134 Duban Ave
Mailing Address On File 5134 Duban Ave Belle Isle, FL 32812-1121 Incorrect Mailing Address?	Postal City and Zipcode Orlando, FL 32812
	Property Use 0103 - Single Fam Class III
	Municipality Belle Isle



View 2017 Property Record Card

Property Features | **Values, Exemptions and Taxes** | Sales Analysis | Location Info | Market Stats | Update Information

2018 values will be available in August of 2018.

Property Description

[View Plat](#)

LAKE CONWAY ESTATES SECTION 5 Y/112 LOT 264

Total Land Area 11,875 sqft (+/-) | 0.27 acres (+/-) GIS Calculated Notice

Land

Land Use Code	Zoning	Land Units	Unit Price	Land Value	Class Unit Price	Class Value
0100 - Single Family	R-1-AA	1 LOT(S)	working...	working...	working...	working...

Page 1 of 1 (1 total records)

Buildings

Important Information		Structure				
	Model Code:	01 - Single Fam Residence	Actual Year Built:	1962	Gross Area:	2547 sqft
	Type Code:	0103 - Single Fam Class III	Beds:	4	Living Area:	1986 sqft
	Building Value:	working...	Baths:	2.0	Exterior Wall:	Concrete/Cinder Block
	Estimated New Cost:	working...	Floors:	1	Interior Wall:	Drywall

Page 1 of 1 (1 total records)

Extra Features

Description	Date Built	Units	XFOB Value
SCR2 - Scrn Enc 2	01/01/1962	1 Unit(s)	working...

Page 1 of 1 (1 total records)