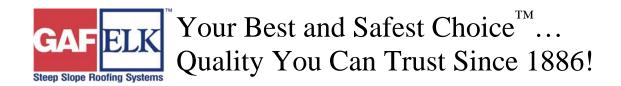
# Florida Building Code Approval

**GAF-Elk Roof Ventilation Products** 

**Updated** 6/9/09











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Product Approval USER: Public User

<u>Product Approval Menu > Product or Application Search > Application List > Application Detail</u>

FL# FL6267-R2 Application Type Revision Code Version 2007 Approved **Application Status** 

Comments Archived

Product Manufacturer **GAF Materials Corporation** 

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Quality Assurance Representative

Address/Phone/Email

Category

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

Florida Engineer or Architect Name who

developed the Evaluation Report

Florida License Quality Assurance Entity

Quality Assurance Contract Expiration Date

Validated By

Robert Nieminen

PE-59166

Underwriters Laboratories Inc.

12/01/2011

John W. Knezevich, PE

✓ Validation Checklist - Hardcopy Received

Certificate of Independence FL6267 R2 COI Trinity ERD CI - Nieminen.pdf

Referenced Standard and Year (of Standard)

**Standard** <u>Year</u> **ASTM D1929** 2000 **ASTM D2565** 2000 ASTM D635 2003 ASTM E330 2002 ASTM E84 2004 2004 ASTM G155

TAS 100(A) 1995 TAS 110 2000

**Equivalence of Product Standards** Certified By

Sections from the Code

Product Approval Method Method 1 Option D

Date Submitted 04/21/2009 Date Validated 04/24/2009 Date Pending FBC Approval 05/03/2009 Date Approved 06/09/2009

Summary of Products				
FL #	Model, Number or Name	Description		
6267.1	GAF-ELK Roof Ventilation Products	Low profile roof ridge vents		
Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A		Installation Instructions FL6267 R2 II er042109FINAL GAF Ventilation FL6267-R2.pdf Verified By: Robert Nieminen PE-59166 Created by Independent Third Party: Yes Evaluation Reports FL6267 R2 AE er042109FINAL GAF Ventilation FL6267-R2.pdf Created by Independent Third Party: Yes		

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## DCA Administration

Department of Community Affairs
Florida Building Code Online
Codes and Standards
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# **Product Approval Accepts:**













EXTERIOR RESEARCH & DESIGN, LLC.

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OXFORD, CT 06478 PHONE: (203) 262-9245

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# **EVALUATION REPORT**

GAF Materials Corporation 1361 Alps Road, Building 7-3 Wayne, NJ 07470 **Evaluation Report 01506.02.06-R2** 

FL6267-R2

Date of Issuance: 02/28/2006 Revision 2: 04/21/2009

#### SCOPE:

This Evaluation Report is issued under Rule 9B-72 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 designed to comply with the 2007 Florida Building Code sections referenced herein.

# **DESCRIPTION: GAF-ELK Roof Ventilation Products**

**LABELING:** Each unit shall bear labeling 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 8.

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 04/21/2009
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.



# **ROOFING COMPONENT EVALUATION:**

# 1. SCOPE:

**Product Category:** Roofing

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

**Compliance Statement:** GAF-ELK Roof Ventilation Products, as produced by GAF Materials Corporation, have demonstrated compliance with the following sections of the 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>
1523.6.5.2.13	Wind Driven Rain	TAS 100(A)	1995
1523.6.5.2.13.1	Physical Properties	TAS 110	2000
1609.1 / 104.11	Wind	ASTM E330	2002
2612.2	Self-Ignition	ASTM D1929	2000
2612.2	Burning Extent	ASTM D635	2003
2612.2	Smoke Density	ASTM E84	2004
2612.2	Weatherometer	ASTM G155	2004
2612.2	Weatherometer	ASTM D2565	2000

# 3. References:

<u>Entity</u>	<b>Examination</b>	<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)	Uniform Static Air Pressure	87103.01-109-44	12/05/2008
ATI (TST 1558)	Uniform Static Air Pressure	87104.01-109-44	01/07/2009
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-023-02-01	12/31/2003
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
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
UL (QUA 1743)	Quality Control	R15072	04/21/2009

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#### 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" wide supplied in 20 and 50 ft long rolls.
- 4.2 **Cobra® Rigid Vent 2<sup>™</sup>** is a plastic, low-profile attic ridge vent for use in shingle roof systems. The product measures 13-13/16" wide supplied in 48" long sections.
- 4.3 **Cobra® Rigid Vent 3™** is a plastic, low-profile attic ridge vent for use in shingle roof systems. The product measures 13-13/16″ wide supplied in 48″ long sections, and is supplied with 3″ ring shank nails.
- 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″ wide supplied in 48″ long sections
- 4.5 **Cobra® Snow Country Advanced™** is a plastic, low-profile attic ridge vent with filter for use in shingle roof systems. The product measures 13-13/16" wide supplied in 48" long sections, and is supplied with 3" ring shank nails.
- 4.6 **Cobra® Ridge Runner™** is a polypropylene plastic, low-profile attic ridge vent for use in shingle roof systems. The product measures 11½″ wide supplied in 20 ft long rolls.
- 4.7 **Vented Ridge Crest™** is a plastic, high-profile attic vent with integral ridge cap shingles. The product measures 13" wide and 13 ¼" long.

#### 5. LIMITATIONS:

- 5.1 This Evaluation Report is not for use in the HVHZ
- 5.2 Minimum slopes are as follows:

<u>Product</u>	Minimum Slope
Cobra® Exhaust Vent	2:12
Cobra® Rigid Vent 2™	3:12
Cobra® Rigid Vent 3™	3:12
Cobra® Snow Country™	3:12
Cobra® Snow Country Advanced™	3:12
Cobra® Ridge Runner™	3:12
Vented Ridge Crest™	4:12

- The maximum mean roof height for Cobra® Exhaust Vent, Cobra® Rigid Vent 2, Cobra® Rigid Vent 3, Cobra® Snow Country, Cobra® Snow Country Advanced and Cobra® Ridge Runner shall be 33 ft.
- 5.4 The maximum design pressure for Vented Ridge Crest<sup>™</sup>, as determined in accordance with FBC Chapter 16, shall be -75 psf.
- Installation shall result in minimum net free ventilation area requirements set forth in FBC Sections 1203.2 and 2326.3.2, with not less than 50% of ventilation from soffit or cornice vents. When more than one level of roof ridge existing over a single attic space, use ridge vents only at the high ridge.

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# 6. INSTALLATION:

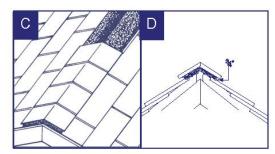
6.1 GAF-ELK Roof Ventilation Products shall be installed in accordance with GAF-ELK published installation requirements subject to the Limitations set forth in Section 5 herein and the specifics noted below.

#### 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.
- 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" 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™ (supplied with the vent). Figure C. Do not use excessive roof cement, as it may result in shingle blistering.

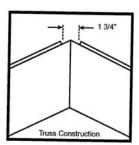


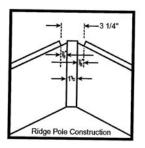






- 6.3 COBRA® RIGID VENT 2<sup>™</sup>, RIGID VENT 3<sup>™</sup>, SNOW COUNTRY<sup>™</sup> AND SNOW COUNTRY ADVANCED<sup>™</sup>:
- 6.3.1 Chalk a cut-line 7/8-inch off each side of the ridge and cut a slot along the apex of the roof measuring 1¾-inch (for truss construction) or 3¼-inch (for ridge pole 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.



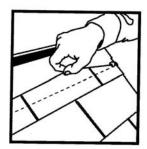




6.3.2 Place, center and confirm the end-piece of ridge vent at each end of the slot. Mark the location of the end of the baffle, and strike a chalk line on both sides of the ridge for baffle alignment. Place a 1/8-inch bead of caulk along the chalk lines and place vent sections centered over the slot and along the chalk lines. Install 3-inch long, corrosion resistant ring shank nails 3-inch from every end at pre-marked locations and then at 9-inch o.c. on both sides of the vent.







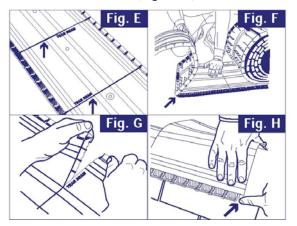


6.3.3 Install ridge shingles in accordance with shingle manufacturer's published installation instructions, using the nail-lines on top of the ridge vent for proper lapping.

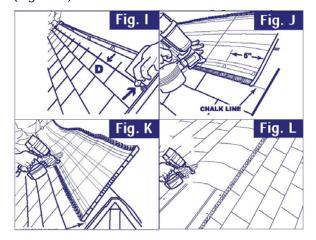


#### 6.4 COBRA® RIDGE RUNNER™

- 6.4.1 Cut slot per 6.3.1.
- 6.4.2 Tear a 1' 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.



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 13/4" pneumatic 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" centers (Figure K).



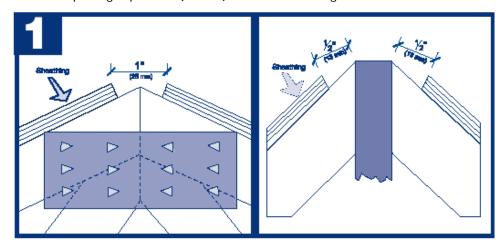
- NOTE: When fastening the vent and cap shingles, be sure that the included 1 3/4" coil nails completely penetrate plywood or provide at least 3/4" penetration into wood planks. In the case they do not, you must use alternate nails that provide the required penetration. Proceed with attaching the other 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.

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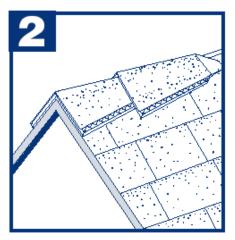


## 6.5 VENTED RIDGE CREST™

6.5.1 Remove old ridge shingles, if present. Snap a chalk line on both sides of the ridge ¾" (19mm) from the peak. Cut a slot with a circular saw and remove debris. Measure the slot. If total opening is less than 1" (25mm), cut an equal amount from each side of the ridge until the opening equals 1" (25mm) in width. See Figure 1.

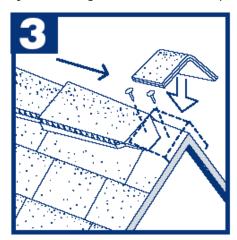


- Fold one piece of the shingle fabric (supplied in box) into thirds, creating three plies that are 3 ½" (89mm) long to create a starter. Fold across the ridge, flush with the rake edge of the shingles. Attach starter with two corrosion resistant, minimum 0.118-inch shank-diameter, minimum 1¾-inch long, deformed shank nails with minimum 3/8-inch head diameter. Note: Longer nails may be required to maintain minimum ¾" (19mm) embedment into wood decks or just through plywood or OSB, but in no case shall nails be less than 1¾-inch long.
- 6.5.3 Place the first piece of Vented Ridge Crest™ Venting Ridge Cap Shingle directly over the starter with the overlap pressed snugly against the starter. Shingles are self aligning and the pieces have tabs on the rear and underneath which allow them to interlock. Ensure the piece is aligned properly with the roof ridge and then nail into place. See figure 2.





- Fasten each piece with two corrosion resistant, minimum 0.118-inch shank-diameter, minimum 1¾-inch long, deformed shank nails with minimum 3/8-inch head diameter. Nail through the reinforced exposed plastic cross hatched nail zone at the rear of each piece. For increased wind resistance, add two nails, 1" (25mm) further in from the first nail. For a total of four nails per piece. In addition to these nails, the leading edge of the first piece may be face nailed as well. Ensure nails penetrate through the plastic backer and into the deck below. Exposed nail heads must be properly sealed with roofing cement or silicone sealant. NOTE: The use of excess roofing cement can cause blistering of the asphalt shingle.
- 6.5.5 Place the next piece snugly on top of the preceding piece, then slide forward until the tabs on the underside engage with the tabs on the rear of the first. Check the interlocking feature by gently trying to lift the front of the second piece. Fasten with two fasteners as above. For increased wind resistance, follow instructions in section 6.5.4.
- 6.5.6 Continue to install each ridge cap shingle along the ridge. Cover the last piece with two layers of shingle fabric or trimmed piece of shingle as shown in Figure 3.



6.5.7 Vented Ridge Crest™ Venting Ride Cap Shingles maybe installed starting at opposite ends of the ride and meeting in the middle, much like cedar roofs. Follow the above application instructions until the selected mid-point in reached. At the midpoint, the rear of each piece should be covered with extra pieces of shingle fabric. Exposed nail heads should be properly sealed with roofing cement or silicone sealant.

# 7. LABELING:

Each unit shall bear a permanent label with the manufacturer's name, logo, city, state and logo of the Accredited Quality Assurance Agency noted herein.

### 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 manufacturer or the named QA entity for information on plants covered under Rule 9B-72 QA requirements.

## 10. QUALITY ASSURANCE ENTITY:

Underwriters Laboratories – QUA1743 (847) 664-3281