The background features a dark blue gradient with faint, light blue technical drawings. On the left side, there are several circular gauges or scales with numerical markings ranging from 140 to 260. Some of these gauges have dashed lines and arrows indicating movement or measurement. The overall aesthetic is technical and professional.

2014 ROOFING PRODUCT APPROVALS AND THE FLORIDA BUILDING CODE FIFTH EDITION (2014) ADVANCED

PRESENTED BY FRSA DIRECTOR OF TECHNICAL SERVICES

MARK ZEHNAL, CPRC

FLORIDA BUILDING CODE

- The Florida Building Code Requires product approvals for certain product categories of a building, for instance building envelope.
 - FBC 110.3(9). Where impact resistant coverings or impact resistant systems are installed, the building official shall schedule adequate inspections of impact resistant coverings or impact resistant systems to determine the following:
 - The system indicated on the plans was installed.
 - The system is installed in accordance with the manufacturer's installation instructions and the product approval.
 - The use of Florida Product Approvals and Miami-Dade Notices of Acceptance have been established through:
 - Florida Statute
 - Florida Administrative Code

FLORIDA BUILDING CODE AND FLORIDA STATUTE 553.842

- 553.842 Product evaluation and approval.—
- (1) The commission shall adopt rules under ss. 120.536(1) and 120.54 to develop and implement a product evaluation and approval system that applies statewide to **operate in coordination with the Florida Building Code.** The commission may enter into contracts to provide for administration of the product evaluation and approval system. The commission's rules and any applicable contract may provide that the payment of fees related to approvals be made directly to the administrator. Any fee paid by a product manufacturer shall be used only for funding the product evaluation and approval system. The product evaluation and approval system shall provide:

FLORIDA BUILDING CODE AND FLORIDA STATUTE 553.842

- 553.842 Product evaluation and approval.
- (8) The commission may adopt rules to approve the following types of entities that produce information on which product approvals are based. All of the following entities, including engineers and architects, must comply with a nationally recognized standard demonstrating independence or no conflict of interest:
- The information found in the product approvals is used to permit, install and inspect as per the requirements of the Florida Building Code.

FLORIDA BUILDING CODE AND FLORIDA STATUTE 553.842 CONTINUED

- 8 (a) Evaluation entities approved pursuant to this paragraph. The commission shall specifically approve the National Evaluation Service, the International Association of Plumbing and Mechanical Officials Evaluation Service, the International Code Council Evaluation Services, and the Miami-Dade County Building Code Compliance Office Product Control. Architects and engineers licensed in this state are also approved to conduct product evaluations as provided in subsection (5).

FLORIDA BUILDING CODE AND FLORIDA ADMINISTRATIVE CODE

- 61G20-3.002 Definitions.
- (31) Structural component means any part or assembly of buildings that comprises the main wind force resisting system and components or cladding.

FLORIDA BUILDING CODE AND FLORIDA ADMINISTRATIVE CODE

CONTINUED

- 61G20-3.001 Scope.
- (1) Products in the following categories as defined by subcategories of subsection 61G20-3.002(31), F.A.C., shall be available for approval by the Commission pursuant to Rule 61G20-3.090, F.A.C., for use in the state:
 - (a) Panel Walls;
 - (b) Exterior Doors;
 - **(c) Roofing Products;**
 - **(d) Skylights;**
 - (e) Windows;
 - (f) Shutters; and
 - (g) Structural Components.
- (2) This rule applies to approval of products and systems, which comprise the building envelope and structural frame, **for compliance with the structural requirements of the Florida Building Code.**

FLORIDA BUILDING CODE AND FLORIDA ADMINISTRATIVE CODE - CONTINUED

- 61G20-3.008 Approval of Product Evaluation Entities, Product Validation Entities, Testing Laboratories, Certification Agencies, Quality Assurance Agencies and Accreditation Bodies.
- (1) Approved Product Evaluation Entities. Approval by the Commission is limited to the scope established by Section 553.842, F.S.
- (a) The following entities are approved evaluation entities:
 - 1. The National Evaluation Service (NES);
 - 2. The Miami-Dade County Building Code Compliance Office Product Control Division (MDCBCCOPCD);
 - 3. The International Code Council, International Evaluation Services (IES); and
 - 4. The International Association of Plumbing and Mechanical Officials Evaluation Service (IAPMO).

FLORIDA BUILDING CODE CHAPTER 15

ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

- **SECTION 1504 PERFORMANCE REQUIREMENTS**

- **1504.1 Wind resistance of roofs.** Roof decks and roof coverings shall be designed for wind loads in accordance with Chapter 16 and Sections 1504.2, 1504.3 and 1504.4.
- **1504.3 Wind resistance of nonballasted roofs.** Roof coverings installed on roofs in accordance with Section 1507 that are mechanically attached or adhered to the roof deck shall be designed to resist the design wind load pressures for components and cladding in accordance with Section 1609.
- **1504.5 Edge securement for low-slope roofs.** Low-slope built-up, modified bitumen and single-ply roof system metal edge securement, except gutters, shall be designed and installed for wind loads in accordance with Chapter 16 and tested for resistance in accordance with Test Methods RE-1, RE-2 and RE-3 of ANSI/SPRI ES-1, or RAS 111, except Vult wind speed shall be determined from Figure 1609A, 1609B, or 1609C as applicable.
- **1504.9 Margin of Safety.** A margin of safety of 2:1 shall be applied to all wind-uplift-resistance test results except when a margin of safety is specified in the test standard.
- **Exception:** Asphalt shingles testing resulting in a miles per hour rating as required in Section 1507.2.7.

VALIDATING ROOFING COMPONENT PRODUCT APPROVALS IN COMPLIANCE WITH FLORIDA BUILDING CODE

- Who needs this information and what propose does it serve?
- FBC 110.3(9). Where impact resistant coverings or impact resistant systems are installed, the building official shall schedule adequate inspections of impact resistant coverings or impact resistant systems to determine the following:
- **107.3.5 Minimum plan review criteria for buildings.** The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/roof framing plan or truss layout; all fenestration penetrations; flashing; and rough opening dimensions; and all exterior elevations:8. Structural requirements shall include:
- **Commercial Buildings:**

VALIDATING ROOFING COMPONENT PRODUCT APPROVALS IN COMPLIANCE WITH FLORIDA BUILDING CODE CONTINUED

- **107.3.5 Minimum plan review criteria for buildings. Continued:**

- **8. Structural requirements shall include:**

- Soil conditions/analysis

- Termite protection

- **Design loads**

- Wind requirements

- Building envelope

- **Impact resistant coverings or systems**

- Structural calculations (if required)

- Foundation

- Flood requirements in accordance with

- Section 1612, including lowest floor

- elevations, enclosures, flood damage resistant materials

- Wall systems

- Floor systems

- **Roof systems**

- Threshold inspection plan

- Stair systems

VALIDATING ROOFING COMPONENT PRODUCT APPROVALS IN COMPLIANCE WITH FLORIDA BUILDING CODE CONTINUED

- **107.3.5 Minimum plan review criteria for buildings. continued**
- **Residential (one- and two-family):**
- 6. Structural requirements shall include:
- Wall section from foundation through roof, **including assembly and materials connector tables wind requirements structural calculations (if required)**
- Flood hazard areas, flood zones, design flood elevations, lowest floor elevations, enclosures, equipment, and flood damage resistant materials
- **8. Impact resistant coverings or systems**

RELYING ON ROOFING COMPONENT PRODUCT APPROVALS IN COMPLIANCE WITH FLORIDA BUILDING CODE

- Who needs this information ?
- Design Professionals:
 - Architects
 - Engineers
 - Contractors
 - Plan Reviewers and Inspectors
 - Insurance Providers

FLORIDA PRODUCT APPROVAL (FPA) IN COMPLIANCE WITH FLORIDA BUILDING CODE

- Owner of the FPA
- Description of Material or System
- FPA Number
- Revision Date
- Issuance Date



EXTERIOR RESEARCH & DESIGN, LLC.
Certificate of Authorization #9503
353 CHRISTIAN STREET, UNIT #13
OXFORD, CT 06478
PHONE: (203) 262-9245
FAX: (203) 262-9243

EVALUATION REPORT

GAF
1361 Alps Road, Building 7-3
Wayne, NJ 07470

Evaluation Report 01506.01.08-R10
FL10124-R8
Date of Issuance: 01/03/2008
Revision 10: 10/22/2012

SCOPE:

This Evaluation Report is issued under Rule 9N-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 designed to comply with the 2010 Florida Building Code section noted herein.

DESCRIPTION: GAF Asphalt Roof Shingles

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 5.

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 10/22/2012. 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.

MIAMI-DADE NOA IN COMPLIANCE WITH FLORIDA BUILDING CODE

- Owner of the NOA
- Description of Material or System
- Additional information and number of pages
- NOA Number
- Expiration Date
- Approval Date



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)
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/pera

NOTICE OF ACCEPTANCE (NOA)

GAF Materials Corp.
1361 Alps Rd.
Wayne, NJ 07470

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 PERA - 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. PERA 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 Timberline® Prestique 30, Timberline® HD, Timberline® Natural Shadow™, and Timberline® American Harvest™ Shingles

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 renews and revises NOA#10-0720.10 and consists of pages 1 through 6.
The submitted documentation was reviewed by Alex Tigera.


MIAMI-DADE COUNTY
APPROVED

NOA No.: 11-1122.04
Expiration Date: 02/21/17
Approval Date: 02/09/12
Page 1 of 6

LOCATING FL PRODUCT APPROVAL'S AND MIAMI-DADE NOA'S

- Manufacturers have most technical documents online
- Supply House
- Florida Building Code Online www.floridabuilding.org
- Miami-Dade Product Control Search www.miamidade.gov/building/pc-search

LOCATING A FLORIDA PRODUCT APPROVAL

- Go to www.floridabuilding.org
- Locate Product Approval 



The screenshot displays the website for the Florida Department of Business Professional Regulation. The header includes the department's name and four main navigation categories: Building, Code, Information, and System. Below the header is a secondary navigation bar with links for BCIS Home, Log In, Register, Hot Topics, Stats and Facts, Publications, FBC Staff, and Links. A vertical sidebar on the left contains buttons for Florida Building Commission, Florida Building Code, Product Approval, Manufactured (Modular) Buildings, Proposed Code Modifications, Education and Accreditation, Binding Interpretations, Surcharge, and Commission Meeting Streaming Video. The main content area features a large image of the Florida State Capitol building with a text overlay stating: "The Effective Date for the Florida Building Code 5th Edition (2014) is June 30, 2015." The footer includes the Florida Building Commission logo and the text "FLORIDA BUILDING COMMISSION".

LOCATING A MIAMI-DADE NOA

Go to http://www.miamidade.gov/building/pc-search_app.asp

- Locate Product Control Search
- Basic Search
- Advanced Search

The screenshot shows the Miami-Dade County website's Product Control Search application. The page title is "MIAMI-DADE COUNTY PERMITTING, ENVIRONMENT AND REGULATORY AFFAIRS". The navigation menu includes Home, Permits & Inspections, Plans, Product Control, Contractors, Building Officials, Compliance, Resources, and Contact Us. The main content area is titled "Product Control Search" and contains a "MIAMI-DADE COUNTY APPROVED" logo. Below the logo, there are two search sections: "Basic Search" and "Advanced Search". The "Basic Search" section has a text input field for "Search by File" and a "Go" button. The "Advanced Search" section has several dropdown menus for "File Classification", "Applicant", "Category", "Subcategory", "Material", and "Impact Rating", each with a "Go" button. There is also a "Reset" button. The page footer includes a "Select Language" dropdown, social media icons, and a "Share" button. The system tray at the bottom shows the date and time as 1:54 PM on 3/20/2013.

IDENTIFY THE ROOF SYSTEM COMPLIANCE WITH FLORIDA BUILDING CODE CHAPTER 15 AND RESIDENTIAL CODE CHAPTER 9

- Shingle (FBC-1507.2, FRC – R905.2)
- Cement/Clay Tile (FBC- 1507.3, FRC – R905.3)
- Metal Panel (FBC- 1507.4, FRC – R905.10)
- Metal Shingle(FBC- 1507.5, FRC – R905.4)
- Built-up (FBC- 1507.10, FRC – R905.9)
- Single Ply (FBC- 1507.13, FRC – R905.13)
- Spray Polyurethane Foam (FBC- 1507.14, FRC – R905.14)

REQUIRED FLORIDA BUILDING CODE DESIGN, INSTALLATION AND INSPECTION INFORMATION FOUND IN FLORIDA PRODUCT APPROVALS AND MIAMI-DADE NOA'S

- Depends on the system type
 - Product Description
 - Manufacturing Plants
 - Limitations (NOA no restrictions, FPA not for use in HVHZ)
 - Installation Description (Singular & Plural)
 - Product Description (Singular & Plural)
 - Limitations
 - Installation

REQUIRED FLORIDA BUILDING CODE DESIGN, INSTALLATION AND INSPECTION INFORMATION FOUND IN FLORIDA PRODUCT APPROVALS AND MIAMI-DADE NOA'S

- Let's look at the sample FPA and NOA
- Shingles (FL101024, 11-1122.04)
 - Product Description
 - Manufacturing Plants
 - Limitations (NOA no restrictions, FPA not for use in HVHZ)
 - Installation
 - Other Roof Components that require additional FPA or NOA

REQUIRED FLORIDA BUILDING CODE DESIGN, INSTALLATION AND INSPECTION INFORMATION FOUND IN FLORIDA PRODUCT APPROVALS AND MIAMI-DADE NOA'S

- Let's look at the sample FPA and NOA
- Tile (FL7473-R3, 11-0321.03)
 - Description (Singular & Plural)
 - Product Description (Singular & Plural)
 - Limitations
 - Installation
 - Other Roof Components that require additional FPA or NOA

KNOWING YOUR PERMIT & SELECTING THE IMPORTANT STUFF IN COMPLIANCE WITH THE FLORIDA BUILDING CODE

- Know the local Authority Having Jurisdiction (AHJ) permit requirements
- There are literally hundreds of building departments across the State of Florida
- Each AHJ has their own set of requirements and there may be local ordinances to consider
- May need more than one NOA or FPA to get permit issued (Roof Components)

CLOSING THE SHOW

- Questions