

## Nemo etc.

Certificate of Authorization #32455 353 Christian Street, Unit #13 Oxford, CT 06478 (203) 262-9245

ENGINEER EVALUATE Test Consult

#### P.E. EVALUATION REPORT (PEER)

#### **Owens Corning**

One Owens Corning Parkway Toledo, OH 43659 (740) 404-7829

## PEER-OC-004.A.R14 FL10674-R19 (NON-HVHZ) Date of Issuance: 02/06/2012

Revision 14: 10/23/2023

#### SCOPE:

This P.E. Evaluation Report (henceforth 'PEER') is issued under **F.A.C.** 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. The product described herein has been evaluated for compliance with the 8<sup>th</sup> Edition (2023) Florida Building Code sections noted herein.

#### **DESCRIPTION: Owens Corning Asphalt Roof Shingles (NON-HVHZ)**

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

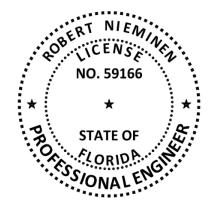
**CONTINUED COMPLIANCE:** This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance, or the production facility location(s). NEMO ETC, LLC requires a complete review of its PEER relative to updated Code requirements with each Code Cycle.

**ADVERTISEMENT:** The Florida Product Approval Number (FL#) preceded by the words "NEMO P.E. Evaluated" may be displayed in advertising literature. If any portion of the PEER is displayed, then it shall be done in its entirety.

**Inspection:** Upon request, a copy of this entire PEER 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 PEER consists of pages 1 through 10.

#### Prepared by:



#### **C**ERTIFICATION OF **I**NDEPENDENCE:

- 1. NEMO ETC, LLC 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. NEMO ETC, LLC 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 PEERs 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 NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

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## **ROOFING SYSTEMS EVALUATION:**

#### 1. SCOPE:

Product Category: Roofing
Sub-Category: Asphalt Shingles

Product Approval Method: Method 1, Option D – Codified Material, Evaluation by Engineer

**Compliance Statement: Owens Corning Asphalt Roof Shingles**, as produced by **Owens Corning**, have demonstrated compliance with the following sections of the **8**<sup>th</sup> **Edition (2023) Florida Building Code** through testing in accordance with the following Standards. Compliance is subject to the <u>Installation Requirements</u> and <u>Limitations of Use</u> set forth herein.

## 2. STANDARDS:

| SECTION                | PROPERTY            | <b>STANDARD</b>   |
|------------------------|---------------------|-------------------|
| 1507.1.1, R905.1.1     | Physical Properties | ASTM D1970        |
| 1507.2.5, R905.2.4     | Material standard   | ASTM D3462        |
| 1507.2.7.1, R905.2.6.1 | Wind Resistance     | ASTM D3161        |
| 1507.2.7.1, R905.2.6.1 | Wind Resistance     | <b>ASTM D7158</b> |

#### 3. References:

| <u>ENTITY</u>  | EXAMINATION            | REFERENCE              | <u>Date</u> |
|----------------|------------------------|------------------------|-------------|
| Owens Corning  | Equivalency            | Declaration            | 08/06/2019  |
| PRI (CER12639) | Various Certifications | Various Certifications | Current     |
| PRI (TST5878)  | ASTM D1970             | OCF-382-02-01          | 10/24/2017  |
| PRI (TST5878)  | ASTM D3161             | OCF-459-02-01          | 08/16/2019  |
| PRI (QUA9110)  | Quality Control        | Service Confirmation   | 04/05/2020  |
| PRI (QUA9110)  | Quality Control        | Florida BCIS           | Current     |

## 4. PRODUCT DESCRIPTION:

| Table 1a: Starter Strips |  |                   |   |
|--------------------------|--|-------------------|---|
| Product                  | PLANT(s)                                     | Material Standard | DESCRIPTION   |
| Starter Strip Shingle    | Houston, TX, Portland, OR                    |                   |   |
| Starter Strip Plus       | Medina, OH; Minneapolis,<br>MN; Portland, OR | ASTM D3462        | starter strips for asphalt roof shingles  |
| SRS TopShield Starter    | Medina, OH; Minneapolis,<br>MN; Portland, OR |                   |   |
| Starter Shingle Roll     | Brentwood, NH                                | ASTM D1970        | mineral-surfaced, fiberglass-reinforced,<br>self-adhering SBS modified bitumen<br>starter |

| Table 1b: Asphalt Shingles |                            |                   |  |
|----------------------------|----------------------------|-------------------|--|
| Product                    | PLANT(s)                   | MATERIAL STANDARD | DESCRIPTION  |
| Supreme*                   | Refer to PRI Certification | ASTM D3462        | fiberglass reinforced 3-tab asphalt roof shingles      |
| Berkshire <sup>®</sup>     | Refer to PRI Certification | ASTM D3462        | fiberglass reinforced, 4-tab asphalt roof shingles     |
| Duration® Premium          | Refer to PRI Certification | ASTM D3462        |  |
| Duration® Premium COOL     | Compton, CA                |                   | fiberglass reinforced, laminated asphalt roof shingles |
| Oakridge <sup>®</sup>      | Refer to PRI Certification |                   | 1001 Simigles  |

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| Table 1b: Asphalt Shingles                         |                            |                   |  |
|--|----------------------------|-------------------|--|
| Product  | Plant(s)                   | Material Standard | DESCRIPTION                              |
| TruDefinition® Duration®                           | Refer to PRI Certification | ASTM D3462        |  |
| TruDefinition® Duration® Designer Color Collection | Refer to PRI Certification |                   | fiberglass reinforced, laminated asphalt |
| TruDefinition® Duration STORM®                     | Refer to PRI Certification |                   | roof shingles                            |
| TruDefinition® Oakridge®                           | Refer to PRI Certification |                   |  |

| TABLE 1C: HIP AND RIDGE SHINGLES                  |                            |                   |  |
|---|----------------------------|-------------------|--|
| Product   | PLANT(s)                   | MATERIAL STANDARD | DESCRIPTION  |
| Berkshire® Hip and Ridge<br>Shingles with Sealant | Refer to PRI Certification | ASTM D3462        |  |
| DuraRidge® Hip and Ridge<br>Shingles with Sealant | Refer to PRI Certification |                   | fiberglass reinforced, hip and ridge asphalt roof shingles |
| ProEdge®  | Refer to PRI Certification |                   |  |

#### 5. LIMITATIONS:

- This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance. PEERs are not to be construed as representing any attributes not specifically listed, nor are PEERs to be construed as an endorsement of the subject, or a recommendation for its use. There is no warranty by NEMO ETC, LLC or Robert Nieminen, P.E., express or implied, as to any finding or other matter in this PEER, or as to any product covered by the PEER.
- 5.2 This PEER is not for use in FBC High Velocity Hurricane Zone jurisdictions, as defined in FBC Chapter 2 (Broward and Miami-Dade Counties).
- 5.3 This PEER pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.
- 5.4 This PEER does not include evaluation of fire classification. Refer to **FBC 1505** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.
- 5.5 Wind Classification: Refer to Section 6 for installation requirements to meet wind classifications

#### 5.5.1 **Starter Strips:**

| TABLE 2A: WIND CLASSIFICATIONS, STARTER STRIPS                     |                                    |  |
|--|------------------------------------|--|
| Product  | FBC TABLE 1507.2.7.1 OR R905.2.6.1 |  |
| Starter Strip Shingle, Starter Strip Plus or SRS TopShield Starter | ASTM D3161, Class F                |  |

## 5.5.2 Asphalt Shingles:

| TABLE 2B: WIND CLASSIFICATIONS, ASPHALT SHINGLES   |                                       |  |
|--|---------------------------------------|--|
| Product  | FBC TABLE 1507.2.7.1<br>OR R905.2.6.1 |  |
| Supreme®, Berkshire®, Duration® Premium, Duration® Premium COOL, TruDefinition® Duration®, TruDefinition® Duration® Designer Color Collection, TruDefinition® Duration STORM®, Oakridge® or TruDefinition® Oakridge® | ASTM D3161(F) and<br>ASTM D7158(H)    |  |



#### 5.5.2.1 Classification by ASTM D7158:

ASTM D7158, Class H applies only to **exposure category B or C** and a **building 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.

#### 5.5.3 Hip and Ridge Shingle:

| TABLE 2C: WIND CLASSIFICATIONS, HIP AND RIDGE SHINGLES   |                                    |  |
|--|------------------------------------|--|
| PRODUCT  | FBC TABLE 1507.2.7.1 or R905.2.6.1 |  |
| Berkshire® Hip and Ridge Shingles with Sealant, DuraRidge® Hip and Ridge Shingles with Sealant or ProEdge® | ASTM D3161, Class F                |  |

- 5.5.4 Refer to Owens Corning published information on wind resistance and installation limitations.
- All components in the roof assembly shall have quality assurance audit in accordance with **F.A.C.** Rule 61G20-3.

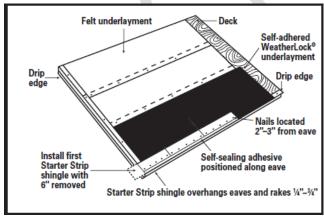
  Refer to the Product Approval of the component manufacturer for components produced by a Product Manufacturer other than the report holder on Page 1 of this PEER.

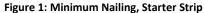
# 6. INSTALLATION: 6.1 GENERAL:

- 6.1.1 Roof deck, slope, underlayment and fasteners shall comply with **FBC 1507.2 / R905.2** and the shingle manufacturer's minimum requirements.
- 6.1.2 Underlayment shall be acceptable to **Owens Corning** and shall hold current <u>Florida Product Approval</u>, or be Locally Approved in accordance with **Rule 61G20-3 (FBC Sections 1507.2.3 or R905.2.3)**.
- 6.1.3 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.
- 6.1.4 Owens Corning asphalt shingles are acceptable for use in reroof (tear-off) or recover applications, subject to the limitations set forth in **FBC Section 1511 or R908** and published installation instructions.

#### **6.2** STARTER SHINGLES:

6.2.1 Installation of **Starter Strip Shingle, Starter Strip Plus and SRS TopShield Starter** shall comply with the **Owens Corning** current published instructions, using minimum five (5) nails per strip.





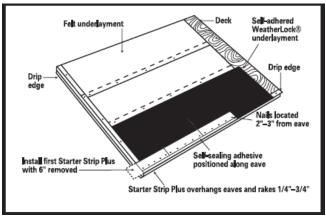


Figure 2: Minimum Nailing, Starter Strip Plus

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6.2.2 Installation of Starter Shingle Roll shall comply with the Owens Corning current published instructions.

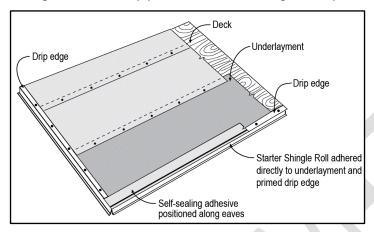


Figure 3: Starter Shingle Roll

#### 6.3 ASPHALT SHINGLES:

- 6.3.1 Installation of asphalt shingles shall comply with the **Owens Corning** 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:
  - > Berkshire shingles require minimum five (5) nails per shingle.

Special methods of fastening are required when the roof slope exceeds 21 units vertical in 12 units horizontal. Refer to Owens Corning published information on wind resistance and installation limitations.

#### 6.3.2 **Supreme**:

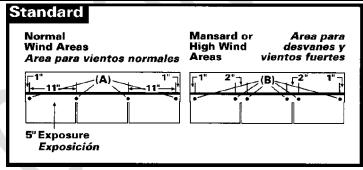


Figure 4: Minimum Nailing, Supreme (Standard Size)

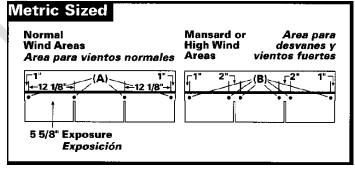
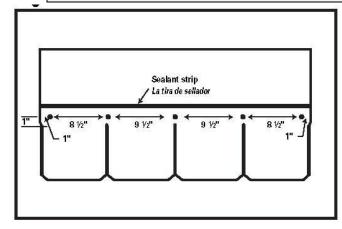


Figure 5: Minimum Nailing, Supreme (Metric Size)



## 6.3.3 **Berkshire**<sup>®</sup>:



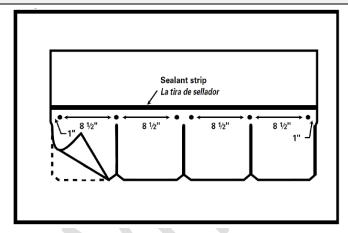


Figure 6: 5-Nail Pattern, Berkshire

Figure 7: 6-Nail Pattern, Berkshire

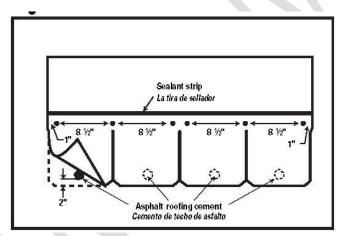


Figure 8: Mansard or Steep Slope Pattern, Berkshire



6.3.4 Duration® Premium, Duration® Premium COOL, TruDefinition® Duration, TruDefinition® Duration Duration® Duration® Collection and TruDefinition® Duration STORM®:

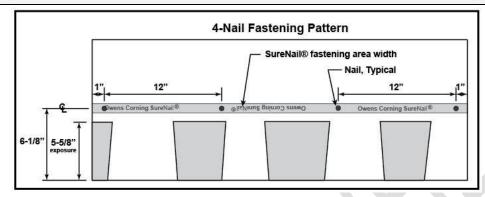


Figure 9: Standard 4-Nail Pattern, Duration

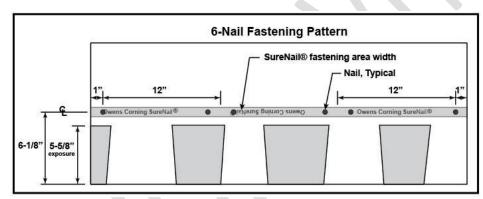


Figure 10: 6-Nail Pattern, Duration

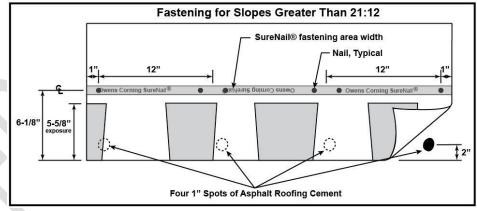
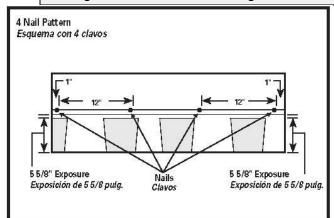


Figure 11: Mansard or Steep Slope Pattern, Duration



## 6.3.5 Oakridge® and TruDefinition® Oakridge®:



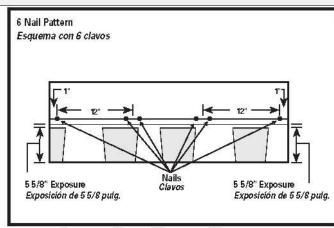


Figure 12: Standard 4-Nail Pattern, Oakridge

Figure 13: 6-Nail Pattern, Oakridge

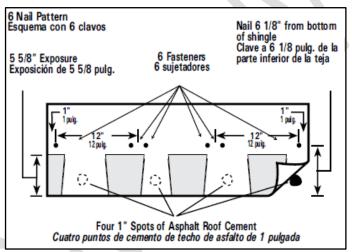


Figure 14: Mansard or Steep-Slope Pattern, Oakridge

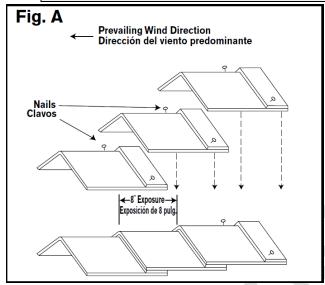


## 6.4 HIP AND RIDGE SHINGLES:

- 6.4.1 Installation of asphalt shingles shall comply with the Owens Corning current published instructions.
  - Berkshire Hip and Ridge Shingles with Sealant and DuraRidge Hip and Ridge Shingles with Sealant require minimum two (2) nails per shingle.

Refer to Owens Corning published information on wind resistance and installation limitations.

## 6.4.2 Berkshire® Hip and Ridge with Sealant and DuraRidge® Hip and Ridge Shingles with Sealant:



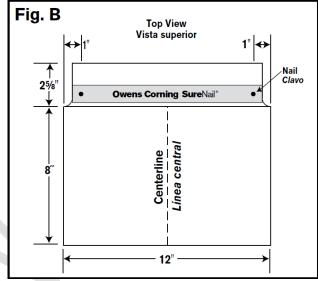


Figure 15: Isometric View, Berkshire and DuraRidge

Figure 16: Plan View, Berkshire and DuraRidge

#### 6.4.3 **ProEdge**®:

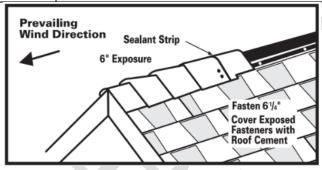


Figure 17: Isometric View, ProEdge

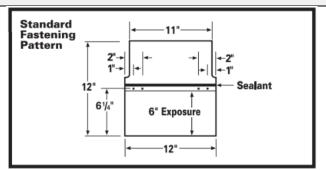


Figure 18: Plan View, ProEdge



## 7. BUILDING PERMIT REQUIREMENTS:

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

## 8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by **F.A.C.** Rule 61G20-3 QA requirements. Refer to Section 4 herein for products and production locations having met codified material standards.

## 9. QUALITY ASSURANCE ENTITY:

PRI Construction Materials Technologies, LLC – QUA9110; (813) 621-5777; bwilson@pricmt.com

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