

Nemo letc.

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

ENGINEER TEST CONSULT

P.E. EVALUATION REPORT (PEER)

Owens Corning Roofing and Asphalt, LLC

One Owens Corning Parkway Toledo, OH 43659 (740) 321-6345

PEER-OC-004.A.R15

FL10674-R20 (NON-HVHZ) Date of Issuance: 02/06/2012 Revision 15: 08/23/2024

SCOPF:

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 8th Edition (2023) Florida Building Code sections noted herein.

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

LABELING: 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: "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.

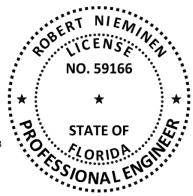
This PEER consists of pages 1 through 11.

Prepared by:

Digitally signed by Robert Nieminen Robert Nieminen, P.E. Printed copies of this document are not

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This item has been digitally signed and sealed by Robert Nieminen, P.E. considered signed and sealed, and the signature Date: 2024.08.23 must be verified on any electronic copies. Robert Nieminen, Florida P.E. 59166, FBC ANE1983 NEMO ETC, LLC, Florida CA #32455



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- NEMO ETC, LLC is not owned, operated, or controlled by any company manufacturing or distributing products it evaluates.
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- 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 Roofing and Asphalt, LLC, have demonstrated compliance with the following sections of the 8th Edition (2023) Florida Building Code through testing in accordance with the following Standards. Compliance is subject to the <u>Installation</u> Requirements and <u>Limitations</u> of Use set forth herein.

2. STANDARDS:

SECTION	PROPERTY	STANDARD
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	ASTM D7158

3. References:

ENTITY	EXAMINATION	REFERENCE	DATE
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 D3462	1378T0011	08/27/2019
PRI (TST5878)	ASTM D3161	1378T0470A	07/18/2024
PRI (TST5878)	ASTM D3161	1378T0470B	07/18/2024
PRI (TST5878)	ASTM D3161	1378T0471	07/18/2024
UL (TST9628)	ASTM D7158 / D3161	4788364899	12/20/2018
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, MN; Portland, OR	ASTM D3462	starter strips for asphalt roof shingles
SRS TopShield Starter	Medina, OH; Minneapolis, MN; Portland, OR		
Starter Shingle Roll	Brentwood, NH	ASTM D1970	mineral-surfaced, fiberglass-reinforced, self-adhering SBS modified bitumen 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 [®]	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 [®]	Refer to PRI Certification		Tool simigles
TruDefinition® Duration®	Refer to PRI Certification		
TruDefinition® Duration® Designer Color Collection	Refer to PRI Certification		
TruDefinition® Duration FLEX®	Refer to PRI Certification	ASTM D3462	fiberglass reinforced, laminated asphalt roof shingles
TruDefinition® Duration STORM®	Refer to PRI Certification		
TruDefinition® Oakridge®	Refer to PRI Certification		

TABLE 1C: HIP AND RIDGE SHINGLES			
Product	PLANT(s)	MATERIAL STANDARD	DESCRIPTION
Berkshire® Hip and Ridge Shingles with Sealant	Refer to PRI Certification	ASTM D3462	
DuraRidge® Hip and Ridge Shingles with Sealant	Refer to PRI Certification		fiberglass reinforced, hip and ridge
ImpactRidge® Hip & Ridge Shingles	Refer to PRI Certification		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 <u>Wind Classification:</u> Refer to <u>Section 6</u> 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:

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TABLE 2B: WIND CLASSIFICATIONS, ASPHALT SHINGLES		
Product	FBC TABLE 1507.2.7.1 OR R905.2.6.1	
Supreme®, Berkshire®, Duration® Premium, Duration® Premium COOL, TruDefinition® Duration®, TruDefinition® Duration® Designer Color Collection, TruDefinition® Duration FLEX®, TruDefinition® Duration STORM®, Oakridge® or TruDefinition® Oakridge®	ASTM D3161(F) and 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, ImpactRidge® Hip & Ridge Shingles 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:

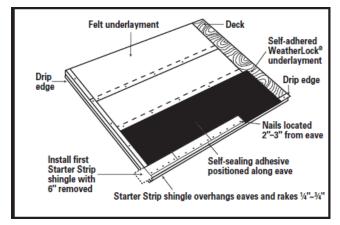
- 6.1.1 Roof deck, slope, underlayment and fasteners shall comply with **FBC 1507.2 / R905.2** and the shingle manufacturer's minimum requirements.
- 6.1.2 Underlayment shall be acceptable to **Owens Corning Roofing and Asphalt, LLC** and shall hold current <u>Florida Product Approval</u>, or be Locally Approved in accordance with <u>Rule 61G20-3</u> (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.

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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 Roofing and Asphalt, LLC** current published instructions, using minimum five (5) nails per strip.



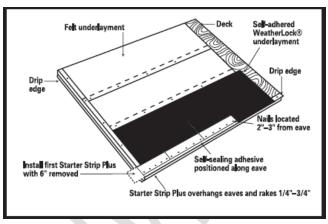


Figure 1: Minimum Nailing, Starter Strip

Figure 2: Minimum Nailing, Starter Strip Plus

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

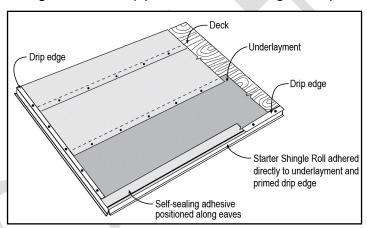


Figure 3: Starter Shingle Roll



6.3 ASPHALT SHINGLES:

- 6.3.1 Installation of asphalt shingles shall comply with the **Owens Corning Roofing and Asphalt, LLC** 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**:

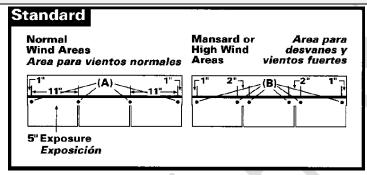


Figure 4: Minimum Nailing, Supreme (Standard Size)

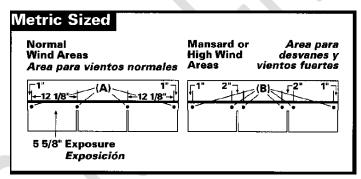
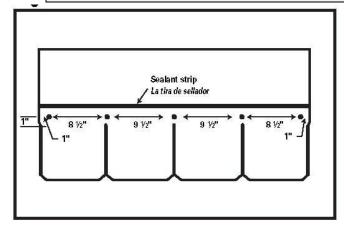


Figure 5: Minimum Nailing, Supreme (Metric Size)



6.3.3 **Berkshire**[®]:



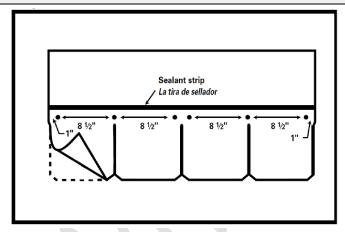


Figure 6: 5-Nail Pattern, Berkshire

Figure 7: 6-Nail Pattern, Berkshire

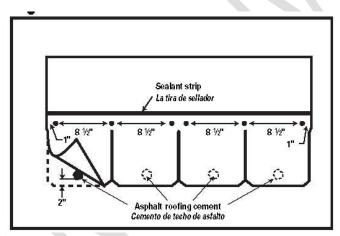


Figure 8: Mansard or Steep Slope Pattern, Berkshire



6.3.4 Duration® Premium, Duration® Premium COOL, TruDefinition® Duration, TruDefinition® Duration Duration® Duration

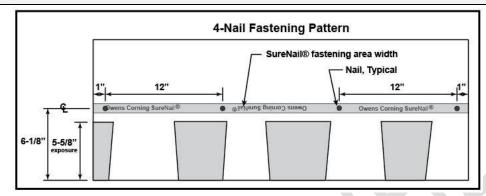


Figure 9: Standard 4-Nail Pattern, Duration

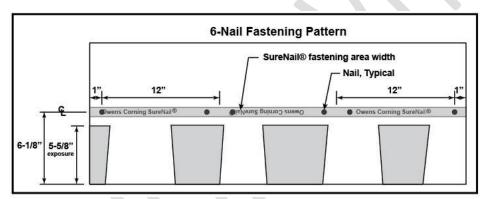


Figure 10: 6-Nail Pattern, Duration

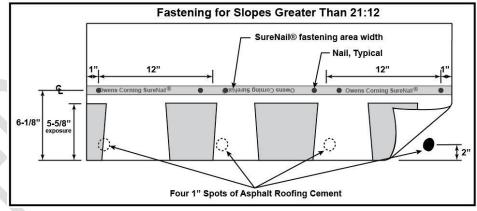
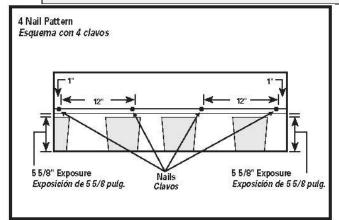


Figure 11: Mansard or Steep Slope Pattern, Duration



6.3.5 Oakridge® and TruDefinition® Oakridge®:



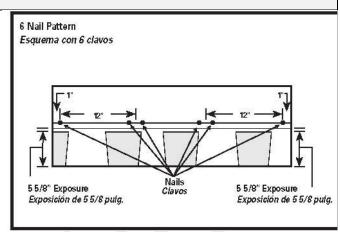


Figure 12: Standard 4-Nail Pattern, Oakridge

Figure 13: 6-Nail Pattern, Oakridge

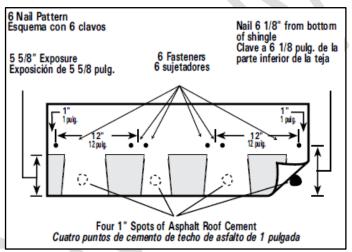


Figure 14: Mansard or Steep-Slope Pattern, Oakridge

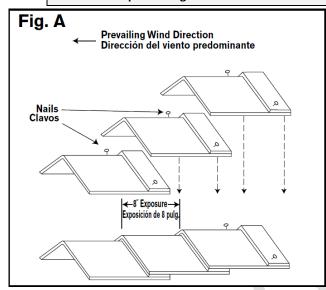


6.4 HIP AND RIDGE SHINGLES:

- 6.4.1 Installation of asphalt shingles shall comply with the Owens Corning Roofing and Asphalt, LLC current published instructions.
 - Berkshire Hip and Ridge Shingles with Sealant, DuraRidge Hip and Ridge Shingles with Sealant, ImpactRidge and ProEdge 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:



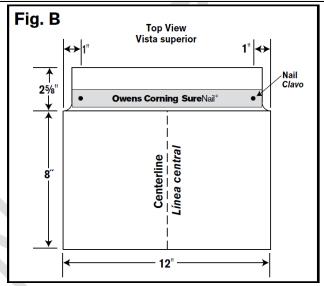
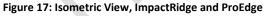


Figure 15: Isometric View, Berkshire and DuraRidge

Figure 16: Plan View, Berkshire and DuraRidge

6.4.3 ImpactRidge® Hip & Ridge Shingles and ProEdge®:





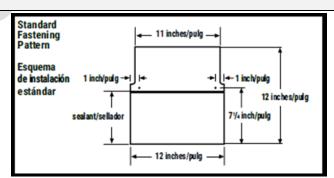


Figure 18: Plan View, ImpactRidge and ProEdge



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.** <u>Rule 61G20-3</u> QA requirements. Refer to <u>Section 4</u> 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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