

Nemo etc.

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ENGINEER EVALUATE TEST CONSULT

EVALUATION REPORT BY FLORIDA P.E.

Owens Corning Parkway

Toledo, OH 43659 (740) 404-7829 Evaluation Report O37940.02.12-R12

FL10674-R17

Date of Issuance: 02/06/2012 Revision 12: 08/12/2022

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. The product described herein has been evaluated for compliance with the **7**th **Edition (2020) Florida Building Code** sections noted herein.

DESCRIPTION: Owens Corning Asphalt Roof Shingles

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

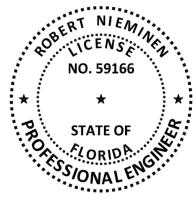
CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our Evaluation Reports by the named client constitutes 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 Evaluation Report 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 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 10.

Prepared by:



CERTIFICATION OF INDEPENDENCE:

- 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 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 NEMO ETC, LLC 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.

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ROOFING SYSTEMS EVALUATION:

1. SCOPE:

3.

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 **7**th **Edition (2020) 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:				
	SECTION	PROPERTY	<u>Standard</u>	<u>YEAR</u>	
	1507.2.4, R905.2.3	Physical Properties	ASTM D1970	2015	
	1507.2.5, R905.2.4	Material standard	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	2019	

REFERENCES: ENTITY EXAMINATION REFERENCE DATE **Owens Corning** Equivalency Declaration 08/06/2019 PRI (TST5878) **ASTM D1970** OCF-382-02-01 10/24/2017 UL LLC (CER9626) Physicals and Wind Resistance File R2453, Vol. 3 02/15/2007 Physicals and Wind Resistance UL LLC (CER9626) 20120516-R2453 05/16/2012 **UL LLC (TST9628) Physical Properties** 06CA20263 04/18/2006 UL LLC (TST9628) Wind Resistance 11CA34308 02/18/2012 UL LLC (TST9628) Physicals and Wind Resistance 4786093137 02/01/2014 UL LLC (TST9628) Wind Resistance 4786126532 02/10/2014 UL LLC (TST9628) **Physical Properties** Classification letter 02/13/2014 UL LLC (TST9628) **Physical Properties** Classification letter 10/02/2015 PRI (TST5878) **ASTM D3462** 1378T0277 05/13/2022 PRI (TST5878) **ASTM D3161** 1378T0278 05/13/2022 **ASTM D7158** 08/12/2022 PRI (TST5878) 1378T0279 PRI (QUA9110) **Quality Control Service Confirmation** 04/05/2020 PRI (QUA9110) **Quality Control** Florida BCIS Current

4. **PRODUCT DESCRIPTION: TABLE 1: ASPHALT SHINGLE COMPONENTS** MATERIAL PLANT(s) **T**YPE **PRODUCT** DESCRIPTION STANDARD Starter Strip Shingle H-TX, OR **ACCESSORY** Starter Strip Plus MN, OR **ASTM D3462** starter strips for asphalt roof shingles STARTER SRS TopShield Starter MN, OR **S**TRIPS mineral-surfaced, fiberglass-reinforced, Starter Shingle Roll NH **ASTM D1970** self-adhering SBS modified bitumen starter GA, CA, CO, I-TX, NJ, OH, fiberglass reinforced 3-tab asphalt Supreme® **ASTM D3462** TN, OR, IL roof shingles fiberglass reinforced, 4-tab asphalt Berkshire® MN **ASTM D3462** ASPHALT roof shingles Duration® Premium SHINGLES CA, OR Duration® Premium COOL CA fiberglass reinforced, laminated **ASTM D3462** GA, IN, CA, CO, H-TX, I-TX, asphalt roof shingles Oakridge® FL, NJ OH, TN



	TABLE 1: ASPHALT SHINGLE COMPONENTS					
Түре	Product	PLANT(s)	Material Standard	DESCRIPTION		
	TruDefinition® Duration®	IN, CA, CO, I-TX, FL, NJ, OH, MN, OR, GA, IL, TN	ASTM D3462	fiberglass reinforced, laminated asphalt roof shingles		
ASPHALT	TruDefinition® Duration® Designer Color Collection	IN, CA, CO, I-TX, FL, NJ, OH, MN, OR, GA, IL, TN				
SHINGLES	TruDefinition® Duration STORM®	TN				
	TruDefinition® Oakridge®	H-TX, I-TX				
	WeatherGuard® HP	TN				
	Berkshire® Hip and Ridge Shingles with Sealant	MN	ASTM D3462	fiberglass reinforced, hip and ridge asphalt roof shingles		
HIP AND RIDGE	DuraRidge® Hip and Ridge Shingles with Sealant	MN				
SHINGLES	ProEdge®	GA, CA, OH, OR				
	WeatherGuard® HP Hip and Ridge Shingles	TN				

5. LIMITATIONS:

- 5.1 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 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 High Velocity Hurricane Zone jurisdictions (i.e., Broward and Miami-Dade Counties).
- 5.3 This Evaluation Report 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 Evaluation Report 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.
- **<u>5.5</u>** <u>Wind Classification:</u> Refer to Section 6 for installation requirements to meet wind classifications

TABLE 2A: 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®	ASTM D3161, Class F and ASTM D7158, Class H			
TruDefinition® Duration® Designer Color Collection				
TruDefinition® Duration STORM®				
Oakridge [®]				
TruDefinition® Oakridge®				
WeatherGuard® HP				

5.5.1 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.



TABLE 2B: WIND CLASSIFICATIONS, STARTER STRIPS AND HIP & RIDGE					
Түре	Product	FBC TABLE 1507.2.7.1 OR R905.2.6.1			
	Starter Strip Shingle				
Starter Strips	Starter Strip Plus	ASTM D3161, Class F			
	SRS TopShield Starter				
	Berkshire® Hip and Ridge Shingles with Sealant	ASTM D3161, Class F			
Hip & Ridge	DuraRidge® Hip and Ridge Shingles with Sealant				
Shingles	ProEdge®				
	WeatherGuard® HP Hip and Ridge Shingles				

- 5.5.2 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 Evaluation Report.

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 the shingle manufacturer and shall hold current Florida Statewide Product Approval, or be Locally Approved per Rule 61G20-3, per FBC Sections 1507.2.3, 1507.2.4 or R905.2.3.
- 6.1.3 Fasteners shall be in accordance with the shingle 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 ACCESSORY STARTERS:

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.

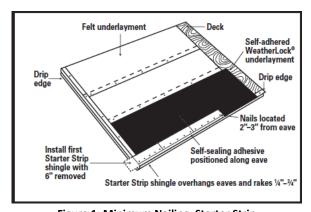


Figure 1: Minimum Nailing, Starter Strip

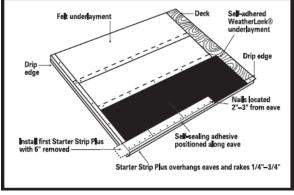


Figure 2: Minimum Nailing, Starter Strip Plus



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

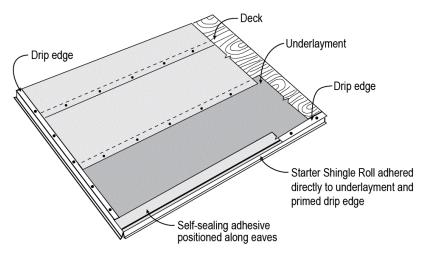


Figure 3: Starter Shingle Roll

6.3 ASPHALT SHINGLES:

- 6.3.1 Installation of asphalt shingles shall comply with the Owens Corning 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.
 - WeatherGuard® HP shingles require minimum six (6) 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.

6.3.1.1 **Supreme**:

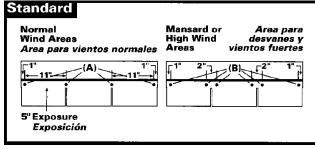


Figure 4: Minimum Nailing, Supreme (Standard Size)

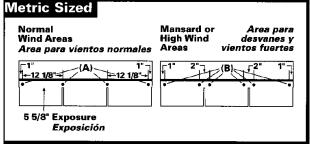
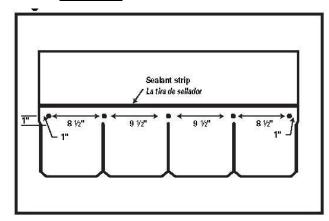


Figure 5: Minimum Nailing, Supreme (Metric Size)



6.3.1.2 Berkshire®:



Sealant strip
La tira de sellador

8 ½"
8 ½"
1"
1"

Figure 6: 5-Nail Pattern, Berkshire

Figure 7: 6-Nail Pattern, Berkshire

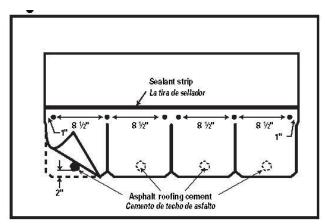


Figure 8: Mansard or Steep Slope Pattern, Berkshire



6.3.1.3 <u>Duration® Premium, Duration® Premium COOL, TruDefinition® Duration, TruDefinition® Duration® Duration® Duration® Collection and TruDefinition® Duration STORM®:</u>

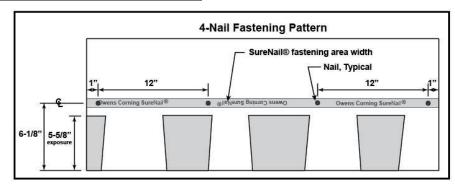


Figure 9: Standard 4-Nail Pattern, Duration

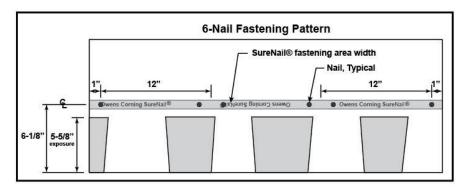


Figure 10: 6-Nail Pattern, Duration

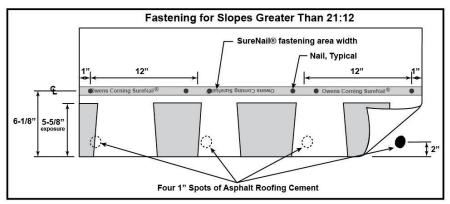


Figure 11: Mansard or Steep Slope Pattern, Duration



6.3.1.4 Oakridge® and TruDefinition® Oakridge®:

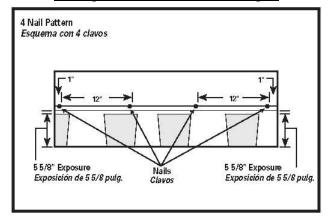


Figure 12: Standard 4-Nail Pattern, Oakridge

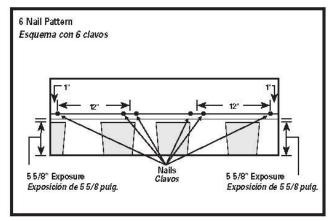


Figure 13: 6-Nail Pattern, Oakridge

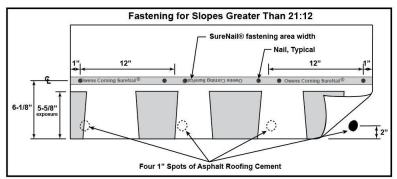


Figure 14: Mansard or Steep-Slope Pattern, Oakridge

6.3.1.5 WeatherGuard® HP:

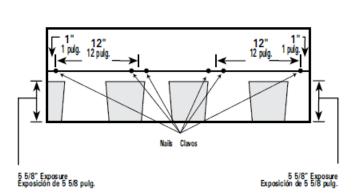


Figure 15: 6-Nail Pattern, WeatherGuard HP

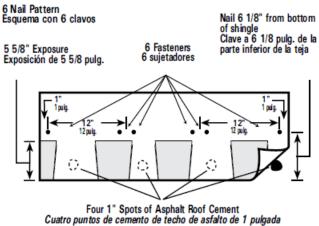


Figure 16: Mansard or Steep-Slope Pattern, WeatherGuard HP



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.
 - WeatherGuard® HP Hip and Ridge Shingles and ProEdge® require minimum four (4) nails per shingle. Refer to Owens Corning published information on wind resistance and installation limitations.

6.4.1.1 Berkshire® Hip and Ridge with Sealant and DuraRidge® Hip and Ridge Shingles with Sealant:

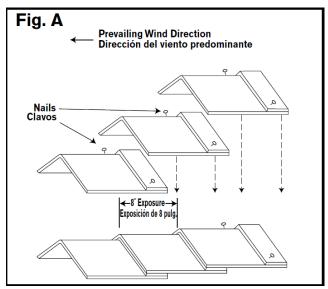


Figure 17: Isometric View, Berkshire and DuraRidge

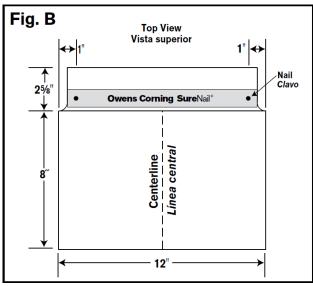


Figure 18: Plan View, Berkshire and DuraRidge

6.4.1.2 WeatherGuard® HP Hip and Ridge Shingles:

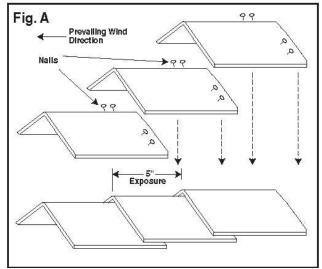


Figure 19: Isometric View, WeatherGuard HP Hip and Ridge

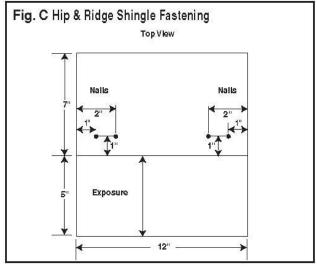


Figure 20: Plan View, WeatherGuard HP Hip and Ridge



6.4.1.3 **ProEdge**[®]:

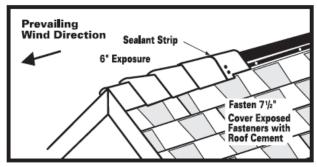


Figure 21: Isometric View, ProEdge

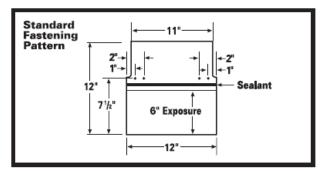


Figure 22: Plan View, ProEdge

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

- END OF EVALUATION REPORT -