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

ENGINEER | EVALUATE | TEST | CONSULT | CERTIFY

EVALUATION REPORT

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

Evaluation Report O37940.02.12-R9
FL10674-R14
Date of Issuance: 02/06/2012
Revision 9: 06/13/2019

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 and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **6th Edition (2017) 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 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. of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO|etc. 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 "NEMO|etc. 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:

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 06/13/2019. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

1. NEMO|etc. 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. 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. 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.

ROOFING SYSTEMS EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Asphalt Shingles
Compliance Statement: **Owens Corning Asphalt Roof Shingles**, as produced by **Owens Corning**, have demonstrated compliance with the following sections of the **6th Edition (2017) Florida Building Code** and **Florida Building Code, Residential Volume** 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	Standard	Year
1507.2.4, R905.2.3	Physical Properties	ASTM D1970	2015
1507.2.5, R905.2.4	Physical Properties	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	2011

3. REFERENCES:

Entity	Examination	Reference	Date
PRI (TST5878)	ASTM D1970	OCF-382-02-01	10/24/2017
UL LLC (CER9626)	Physicals & Wind Resistance	File R2453, Vol. 3	02/15/2007
UL LLC (CER9626)	Physicals & Wind Resistance	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 & 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
Miami-Dade (CER1592)	FBC HVHZ Compliance	Various NOAs	Various
PRI (QUA9110)	Quality Control	Service Confirmation	04/05/2020

4. PRODUCT DESCRIPTION:

4.1 ACCESSORY STARTERS:

4.1.1 Starter Strip Shingle and Starter Strip Plus are starter strips for asphalt roof shingles. Meets ASTM D3462.

4.1.2 Starter Shingle Roll is a mineral-surfaced, fiberglass-reinforced, self-adhering SBS modified bitumen starter strip, nominal 7.2-inch wide x 33-ft 4-inch long roll, for use with asphalt shingles. Meets ASTM D1970.

4.2 ASPHALT SHINGLES:

4.2.1 Classic® and Supreme® are fiberglass reinforced, 3-tab asphalt roof shingles. Meets ASTM D3462.

4.2.2 Berkshire® are fiberglass reinforced, 4-tab asphalt roof shingles. Meets ASTM D3462.

4.2.3 Duration®, TruDefinition® Duration®, Duration® Premium Cool, TruDefinition® Duration® Designer Color Collection, TruDefinition® Oakridge®, Oakridge® and WeatherGuard® HP are fiberglass reinforced, laminated asphalt roof shingles. Meets ASTM D3462.

4.3 HIP & RIDGE SHINGLES:

4.3.1 Berkshire® Hip & Ridge Shingles with Sealant, DuraRidge® Hip & Ridge Shingles with Sealant, ProEdge® Hip & Ridge Shingles and WeatherGuard® HP Hip & Ridge Shingles are fiberglass reinforced, hip and ridge asphalt roof shingles. Meets ASTM D3462.

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 HVHZ jurisdictions.

5.3 Fire Classification is not part of this Evaluation Report; refer to current Approved Roofing Materials Directory for fire ratings of this product.

5.4 Wind Classification:

5.4.1 The Owens Corning asphalt shingles noted in Section 4.2 are Classified in accordance with FBC Tables 1507.2.7.1 and R905.2.6.1 to ASTM D3161, Class F and/or ASTM D7158, Class H, indicating acceptable use in all wind zones up to V_{asd} = 150 mph (V_{ult} = 194 mph). Refer to Section 6 for installation requirements to meet this wind rating.

Note: Classification by ASTM D7158 applies only to exposure category B or C, as defined in FBC 1609.4.3, and a mean roof 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.

5.4.2 Starter Strip Shingle and Starter Strip Plus noted in Section 4.1.1 and the Owens Corning hip & ridge shingles noted in Section 4.3 are Classified in accordance with FBC Tables 1507.2.7.1 and R905.2.6.1 to ASTM D3161, Class F, indicating acceptable use in all wind zones up to V_{asd} = 150 mph (V_{ult} = 194 mph). Refer to Section 6 for installation requirements to meet this wind rating.

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

5.5 All products in the roof assembly shall have quality assurance audit in accordance with F.A.C. Rule 61G20-3.

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

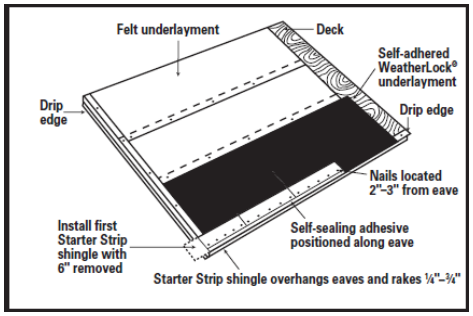


Figure 1: Minimum Nailing, Starter Strip

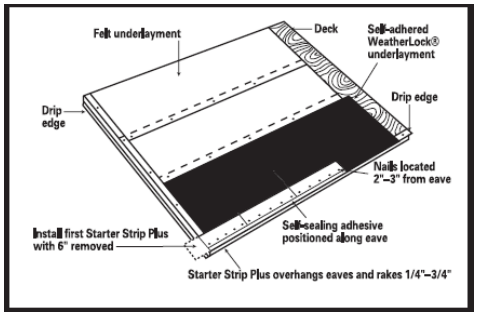


Figure 2: Minimum Nailing, Starter Strip Plus

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

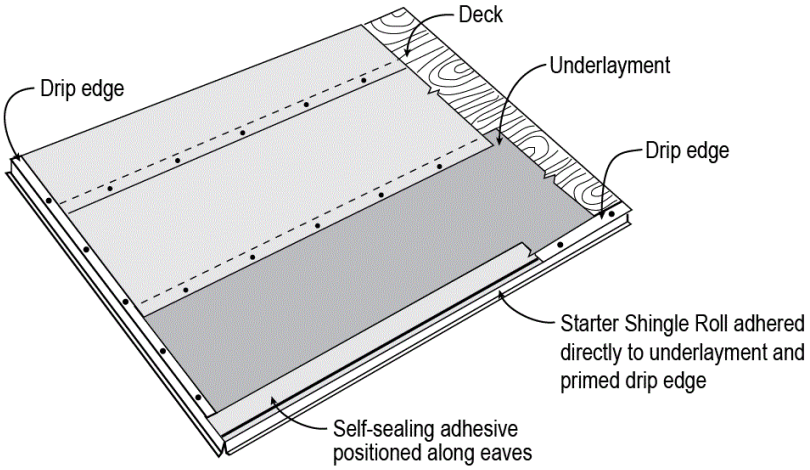


Figure 3: Starter Shingle Roll

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.

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

6.3.1.1 **Classic® & Supreme**:

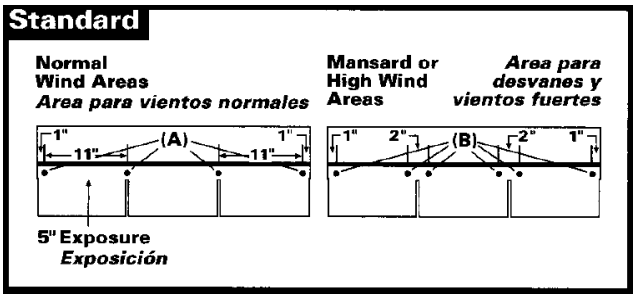


Figure 4: Minimum Nailing, Classic & Supreme (Standard Size)

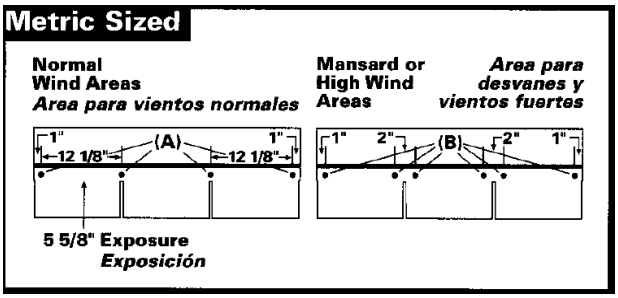


Figure 5: Minimum Nailing, Classic & Supreme (Metric Size)

6.3.1.2 **Berkshire®:**

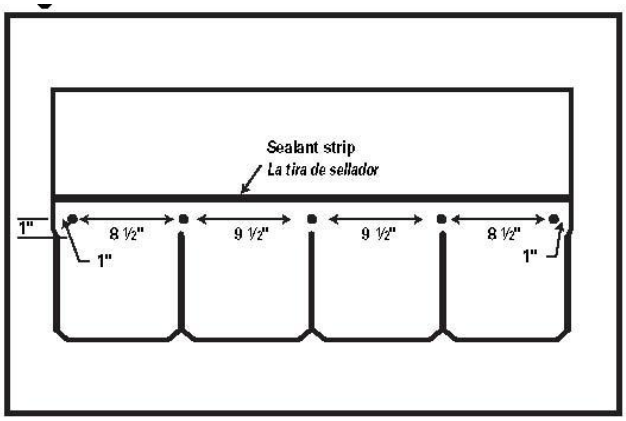


Figure 6: 5-Nail Pattern, Berkshire

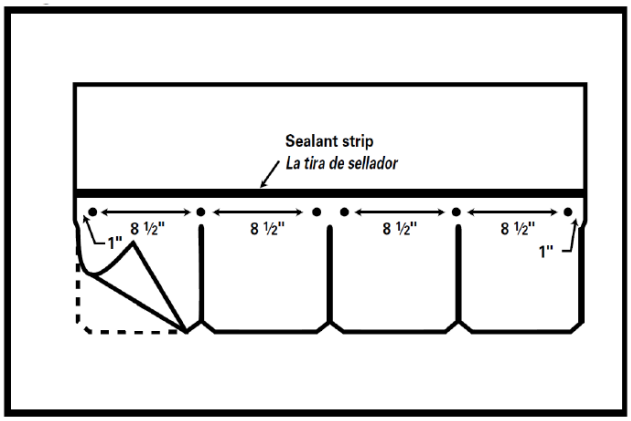


Figure 7: 6-Nail Pattern, Berkshire

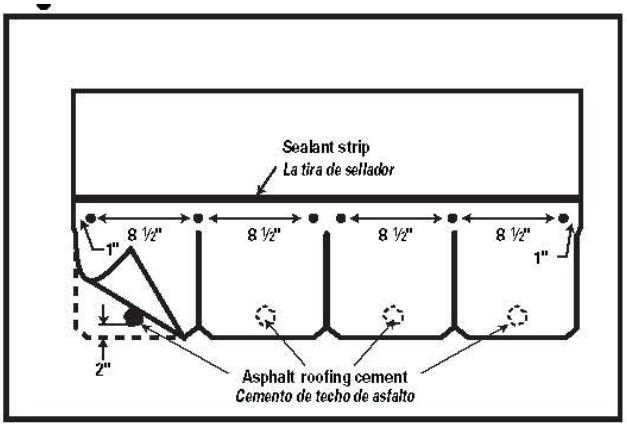


Figure 8: Mansard or Steep Slope Pattern, Berkshire

6.3.1.3 **Duration®, TruDefinition® Duration, Duration® Premium Cool & TruDefinition® Duration® Designer Color Collection**:

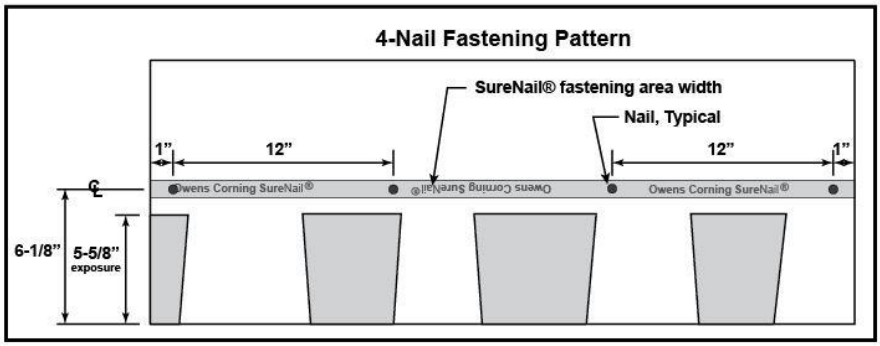


Figure 9: Standard 4-Nail Pattern, Duration

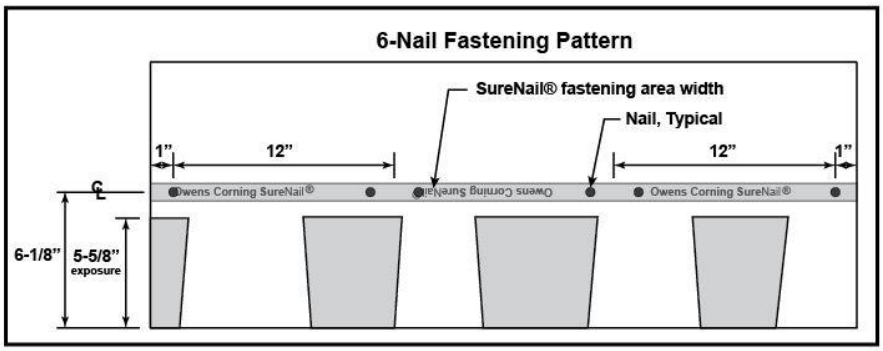


Figure 10: 6-Nail Pattern, Duration

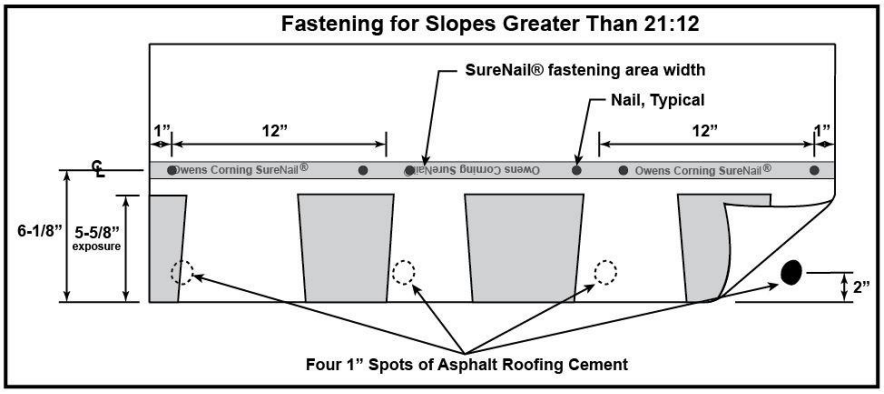


Figure 11: Mansard or Steep Slope Pattern, Duration

6.3.1.4 **TruDefinition® Oakridge®, Oakridge®:**

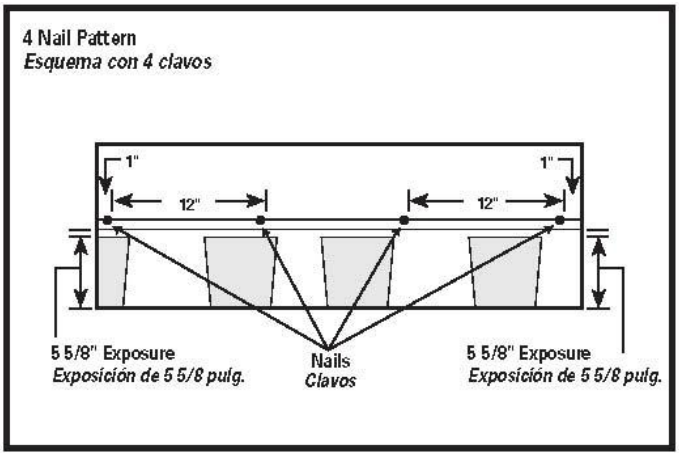


Figure 12: Standard 4-Nail Pattern, Oakridge

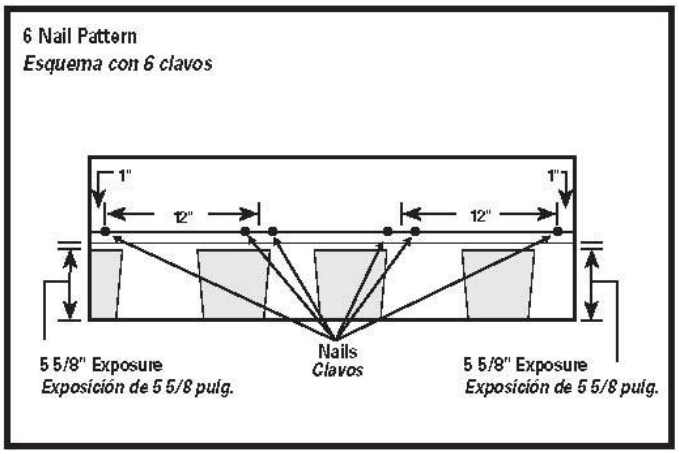


Figure 13: 6-Nail Pattern, Oakridge

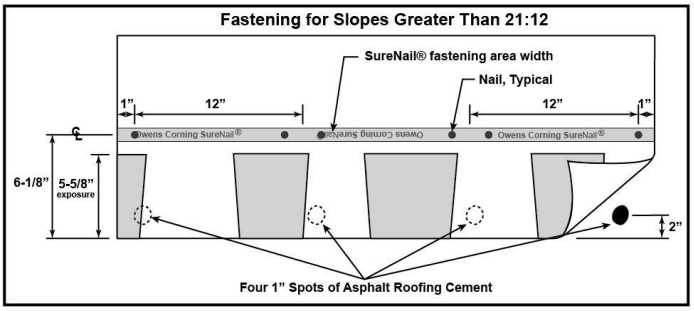


Figure 14: Mansard or Steep-Slope Pattern, Oakridge

6.3.1.5 **WeatherGuard® HP**:

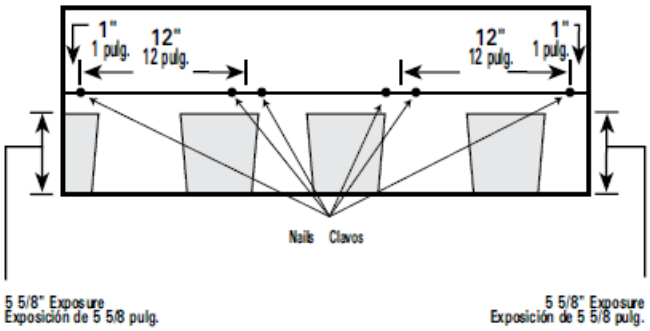


Figure 15: 6-Nail Pattern, WeatherGuard HP

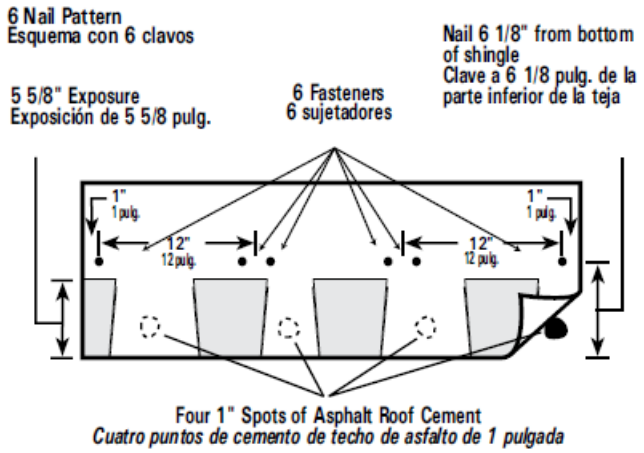


Figure 16: Mansard or Steep-Slope Pattern, WeatherGuard HP

6.4	HIP & 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 & Ridge Shingles *with Sealant* require minimum two (2) nails per shingle.
- WeatherGuard® HP Hip and Ridge Shingles and ProEdge® Hip & Ridge Shingles 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 & Ridge *with Sealant* and DuraRidge® Hip & Ridge Shingles *with Sealant*:**

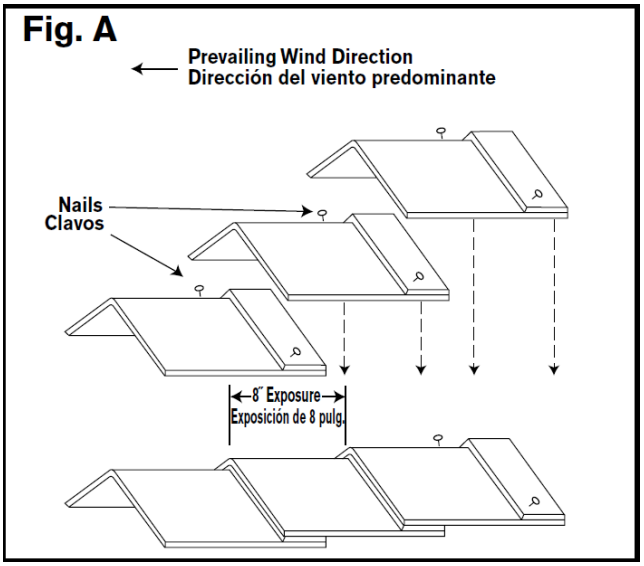


Figure 17: Isometric View, Berkshire and DuraRidge

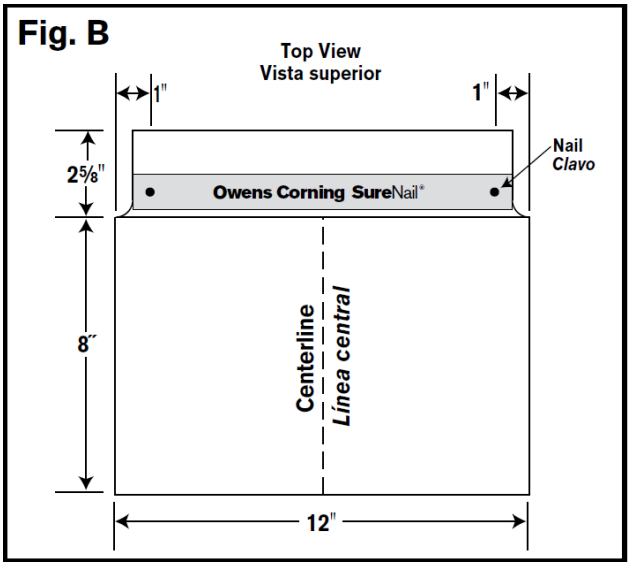


Figure 18: Plan View, Berkshire and DuraRidge

6.4.1.2 **WeatherGuard® HP Hip & Ridge Shingles:**

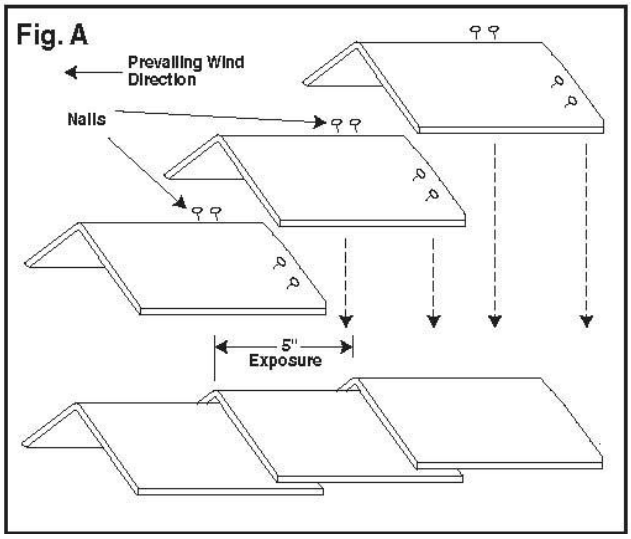


Figure 19: Isometric View, WeatherGuard HP Hip & Ridge

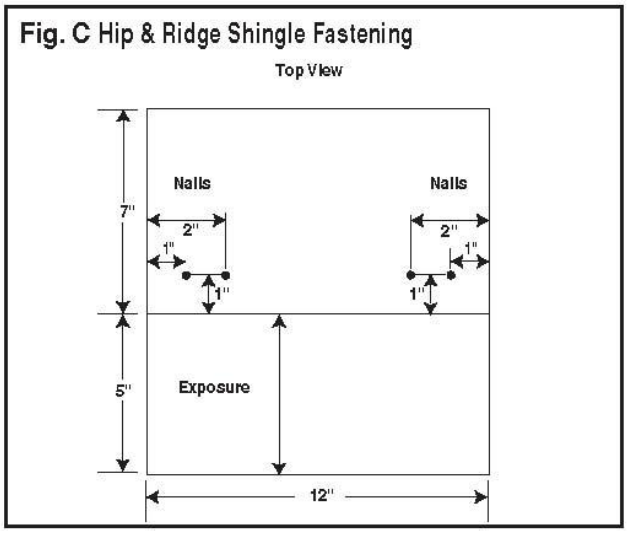


Figure 20: Plan View, WeatherGuard HP Hip & Ridge

6.4.1.3 **ProEdge® Hip & Ridge Shingles**:

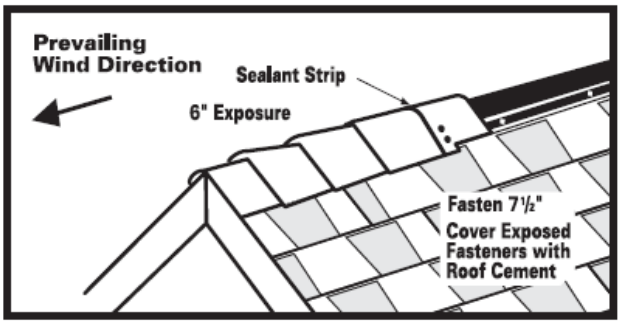


Figure 21: Isometric View, ProEdge

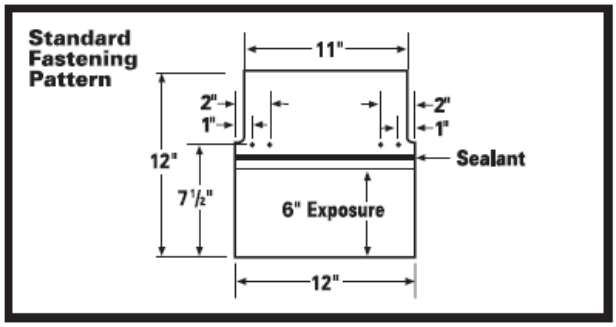


Figure 22: Plan View, ProEdge

7. LABELING:

7.1 Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein.

7.2 Asphalt shingle wrappers shall indicate compliance with one of the required classifications detailed in **FBC Table 1507.2.7.1 / R905.2.6.1**.

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 named QA entity for information on which plants produce products covered by Florida Rule 61G20-3 QA requirements.

10. QUALITY ASSURANCE ENTITY:

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

- END OF EVALUATION REPORT -