



NEMO|etc.

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

ENGINEER	EVALUATE	TEST	CONSULT
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#### EVALUATION REPORT

##### Owens Corning

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

Evaluation Report O37940.02.12-R11

FL10674-R16

Date of Issuance: 02/06/2012  
Revision 11: 12/11/2020

##### 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<sup>th</sup> 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 (FPA) 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 12/11/2020. This does not serve as an electronically signed document.

##### CERTIFICATION OF INDEPENDENCE:

- 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.
- NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
- 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.
- 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.
- 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:

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 7<sup>th</sup> 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	Standard	Year
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

##### 3. REFERENCES:

Entity	Examination	Reference	Date
Owens Corning	Declaration	Equivalency Declaration	08/06/2019
PRI (T57878)	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 (T579628)	Physical Properties	06CA20263	04/18/2006
UL LLC (T579628)	Wind Resistance	11CA34308	02/18/2012
UL LLC (T579628)	Physicals & Wind Resistance	4786093137	02/03/2014
UL LLC (T579628)	Wind Resistance	4786126532	02/10/2014
UL LLC (T579628)	Physical Properties	Classification letter	02/13/2014
UL LLC (T579628)	Physical Properties	Classification letter	10/02/2015
PRI (QUA9110)	Quality Control	Service Confirmation	04/05/2020
PRI (QUA9110)	Quality Control	Florida BCIS	Current

##### 4. PRODUCT DESCRIPTION:

TABLE 1: ASPHALT SHINGLE COMPONENTS				
Type	Product	Plant(s)	Material Standard	Description
Accessory Starter Strips	Starter Strip Shingle	H-TX, OR	ASTM D3462	starter strips for asphalt roof shingles
	Starter Strip Plus	MN, OR		
	SRS TopShield Starter	MN, OR		
Asphalt Shingles	Starter Shingle Roll	NH	ASTM D1970	mineral-surfaced, fiberglass-reinforced, self-adhering SBS modified bitumen starter
	Supreme <sup>®</sup>	GA, CA, CO, I-TX, NJ, OH, TN, OR, IL, TN	ASTM D3462	fiberglass reinforced 3-tab asphalt roof shingles
	Berkshire <sup>®</sup>	MN	ASTM D3462	fiberglass reinforced, 4-tab asphalt roof shingles
	Duration <sup>®</sup> Premium	CA, OR	ASTM D3462	fiberglass reinforced, laminated asphalt roof shingles
	Duration <sup>®</sup> Premium COOL	CA		
	TruDefinition <sup>®</sup> Duration <sup>®</sup>	IN, CA, CO, I-TX, FL, NJ, OH, MN, OR, GA, IL, TN		
	TruDefinition <sup>®</sup> Duration <sup>®</sup> Designer Color Collection	IN, CA, CO, I-TX, FL, NJ, OH, MN, OR, GA, IL, TN		
	Oakridge <sup>®</sup>	GA, IN, CA, CO, H-TX, I-TX, FL, NJ, OH, TN		
	TruDefinition <sup>®</sup> Oakridge <sup>®</sup>	H-TX, I-TX		
	WeatherGuard <sup>®</sup> HP	TN		

NEMO ETC, LLC  
Certificate of Authorization #32455

7<sup>th</sup> EDITION (2020) FBC NON-HVHZ EVALUATION  
Owens Corning Asphalt Roof Shingles

Evaluation Report O37940.02.12-R11  
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TABLE 1: ASPHALT SHINGLE COMPONENTS				
Type	Product	Plant(s)	Material Standard	Description
Hip and Ridge Shingles	Berkshire <sup>®</sup> Hip and Ridge Shingles with Sealant	MN	ASTM D3462	fiberglass reinforced, hip and ridge asphalt roof shingles
	DuraRidge <sup>®</sup> Hip and Ridge Shingles with Sealant	MN		
	ProEdge <sup>®</sup>	GA, CA, OH, OR		
	WeatherGuard <sup>®</sup> HP Hip and Ridge Shingles	TN		

##### 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 Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- This Evaluation Report is not for use in FBC High Velocity Hurricane Zone jurisdictions (i.e., Broward and Miami-Dade Counties).
- 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.
- 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.

##### 5.5 Wind Classification: 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 <sup>®</sup>	ASTM D3161(F) & ASTM D7158(H)
Berkshire <sup>®</sup>	
Duration <sup>®</sup> Premium	
Duration <sup>®</sup> Premium COOL	
TruDefinition <sup>®</sup> Duration <sup>®</sup>	
TruDefinition <sup>®</sup> Duration <sup>®</sup> Designer Color Collection	
Oakridge <sup>®</sup>	
TruDefinition <sup>®</sup> Oakridge <sup>®</sup>	
WeatherGuard <sup>®</sup> 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.



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

- 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 that are produced by a Product Manufacturer other than the report holder on Page 1 of this Evaluation Report.

##### 6. INSTALLATION:

###### 6.1 GENERAL:

- Roof deck, slope, underlayment and fasteners shall comply with FBC 1507.2 / R905.2 and the shingle manufacturer's minimum requirements.
- 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.
- 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.
- Owens Corning asphalt shingles are acceptable for use in re-roof (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:

- 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.

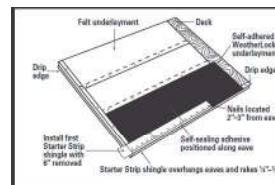


Figure 1: Minimum Nailing, Starter Strip

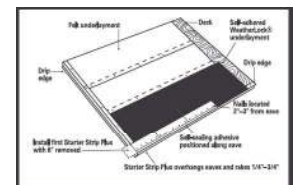


Figure 2: Minimum Nailing, Starter Strip Plus

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

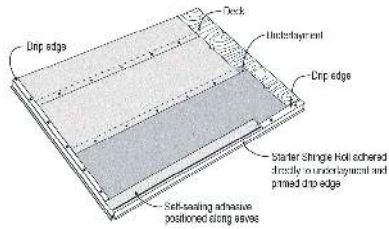


Figure 3: Starter Shingle Roll

### 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.
- 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 Supreme:

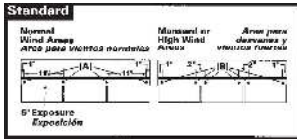


Figure 4: Minimum Nailing, Supreme (Standard Size)

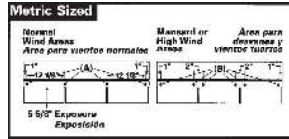


Figure 5: Minimum Nailing, Supreme (Metric Size)

#### 6.3.1.2 Berkshire®:

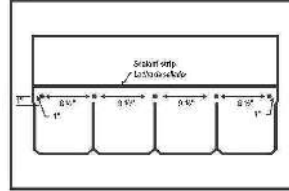


Figure 6: 5-Nail Pattern, Berkshire

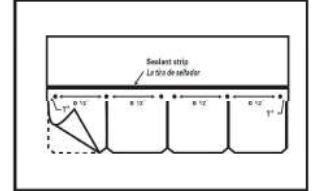


Figure 7: 6-Nail Pattern, Berkshire

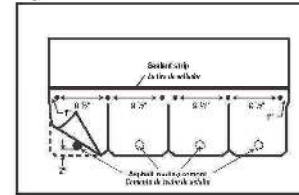


Figure 8: Mansard or Steep Slope Pattern, Berkshire

#### 6.3.1.3 Duration® Premium, TruDefinition® Duration, Duration® Premium COOL & TruDefinition® Duration® Designer Color Collection:

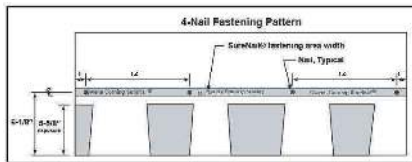


Figure 9: Standard 4-Nail Pattern, Duration

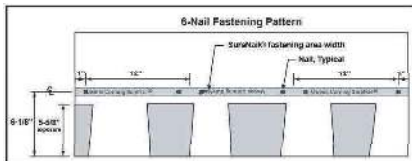


Figure 10: 6-Nail Pattern, Duration

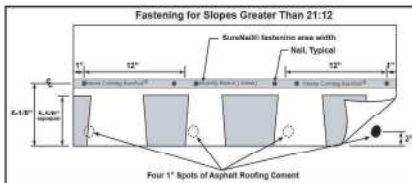


Figure 11: Mansard or Steep Slope Pattern, Duration

#### 6.3.1.4 TruDefinition® Oakridge®, Oakridge®:

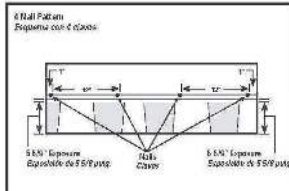


Figure 12: Standard 4-Nail Pattern, Oakridge

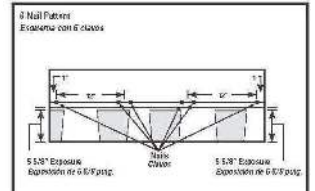


Figure 13: 6-Nail Pattern, Oakridge

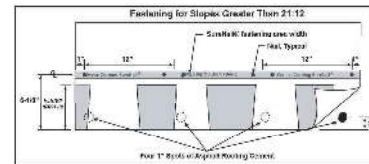


Figure 14: Mansard or Steep-Slope Pattern, Oakridge

#### 6.3.1.5 WeatherGuard® HP:

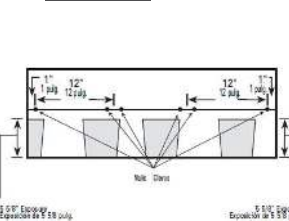


Figure 15: 6-Nail Pattern, WeatherGuard HP

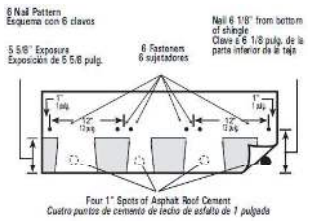


Figure 16: Mansard or Steep-Slope Pattern, WeatherGuard HP

#### 6.4 HIP 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:

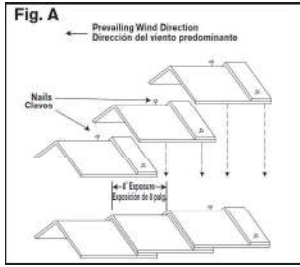


Figure 17: Isometric View, Berkshire and DuraRidge

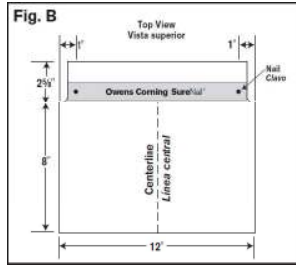


Figure 18: Plan View, Berkshire and DuraRidge

##### 6.4.1.2 WeatherGuard® HP Hip and Ridge Shingles:

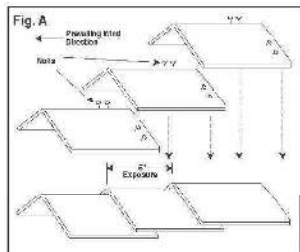


Figure 19: Isometric View, WeatherGuard HP Hip and Ridge

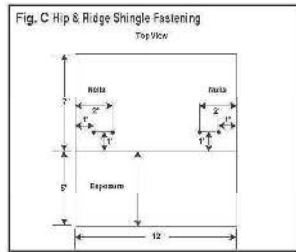


Figure 20: Plan View, WeatherGuard HP Hip and Ridge

##### 6.4.1.3 ProEdge®:

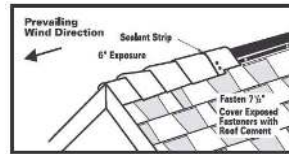


Figure 21: Isometric View, ProEdge

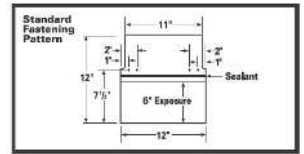


Figure 22: Plan View, ProEdge

#### 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- QA9110; (813) 621-5777; [bwilson@pricmt.com](mailto:bwilson@pricmt.com)

- END OF EVALUATION REPORT -



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
BOARD AND CODE ADMINISTRATION DIVISION

#### NOTICE OF ACCEPTANCE (NOA)

SRS Distribution, Inc.  
5900 South Lake Forest Drive Suite 400  
McKinney, TX 75070

#### 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 RER - 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. RER 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: SRS TopShield Ice & Water G300

**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 NOA consists of pages 1 through 6.

The submitted documentation was reviewed by *Freddy Semino*



#### ROOFING COMPONENT APPROVAL

**Category:** Roofing  
**Sub-Category:** Underlayment  
**Material:** Asphalt, SBS, Polystyrene

#### SCOPE:

This acceptance is for SRS TopShield Ice & Water G300 Underlayment, for use with approved prepared roof assemblies where the applicable TAS/ASTM specific underlayment is specified and installed with prescribed approved adhesives, fasteners and fastener densities, as described in this Notice of Acceptance, designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone of the Florida Building Code.

#### TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

Product	Dimensions	Test Specification	Product Description
TopShield Ice & Water G300	3' x 66"8" rolls 3' x 33"4" rolls	ASTM D1970	Fine granular surfaced, fiberglass reinforced, bituminous sheet material with a self-adhesive bottom layer, for use as an underlayment in sloped roof assemblies. Designed as an ice and water shield, and a shingle roofing underlayment.
Manufacturing Location #1 & #2			

#### MANUFACTURING LOCATION:

- Greencastle, PA
- Belton, TX



**EVIDENCE SUBMITTED:**

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Atlantic & Caribbean Roof Consulting, LLC	ACRC06-013	TAS 103	06/14/06
PRI Asphalt Technologies	TOT-003-02-01	ASTM D226 Type II	08/22/02
	TOT-029-02-01	TAS 110, ASTM D249 & D 6380	07/05/05
	TOT-030-02-01	TAS 110, ASTM D249 & D 6380	07/05/05
	TOT-041-02-01	TAS 110, ASTM D226 Type II	05/24/06
	TOT-042-02-01	ASTM D4798 & ASTM G155	05/22/07
Trinity   ERD	T3580.10.06-2	TAS 103	10/26/06
	T3580.10.06	TAS 103, ASTM D6380	10/12/06
	T30160.08.09-R1	ASTM D1970	10/12/10
	T10550.07.08	ASTM D4798 & ASTM D1970	07/30/08
	T32530.08.10	ASTM D1970	08/17/10
	T33190.08.10	TAS 103	08/06/10
	T43930.09.13-R2	TAS 104	09/11/13
	T40790.04.12	ASTM D6380	04/06/12
	T40780.04.12	ASTM D3909	04/06/12
	T37610.07.11	TAS 114-D	07/29/11
IRT-Arcon	IRT07-0006	ASTM D1970	07/11/07
	IRT 07-0036	ASTM D1970	02/22/08
	IRT08-0002	ASTM D1970	02/22/08
NEMO/etc.	TAR-SC8020.06.18	TAS 103, D4798	06/05/18
	4j-TAR-19-SSUDL-01.A	TAS 110	08/27/19

**INSTALLATION REQUIREMENTS –SRS TopShield Ice & Water G300 SELF-ADHERED UNDERLAYMENT:**

1. SRS TopShield Ice & Water G300 self adhering underlayment shall be installed in strict compliance with applicable Building Codes.
2. Observe and comply with roofing practices and guidelines as outlined by the National Roofing Contractors Associations (NRCA) when installing SRS self adhering underlayment.
3. During installation, comply with Occupational Safety and Health Administration (OSHA) safety standards; use common sense measures and adequate safety precautions to prevent accidents.
4. TopShield Ice & Water G300 shall be an acceptable underlayment for asphaltic shingles, wood shakes and shingles, and slate or simulated slate roof assemblies.
5. Re-fasten any loose decking panels, and check for protruding nail heads prior to the application of the SRS self adhering underlayment.
6. SRS TopShield Ice & Water G300 self adhering underlayment shall not be adhered directly over any pre-existing roof membrane.
7. All approved substrates are to be clean, dry and free of any loose debris or moisture prior to the application of the SRS TopShield Ice & Water G300 self adhering underlayment. Refer applicable building codes prior to installation to verify acceptable substrates.
8. Prime all metal collars, flashing, valleys, liner, drip edge and concrete deck substrate with ASTM D 41 primer, water based acrylic or water based polymer modified primer.
9. Contractor may cut the underlayment into sections for workability and allow to relax prior to application.
10. Place the underlayment over metal drip edge in accordance with RAS 111.
11. Install the first course of underlayment parallel to the eave edge.
12. Apply the underlayment, working from the center of the material continuously to the ends of the sheet (half of the length of the sheet is the center); taking care to avoid wrinkles and ridges.
13. Remove the underlayment release film rapidly in a continuous fashion. Ensure the bottom adhesive side of the membrane does not adhere to its self. In the event this transpires, separate the two layers immediately. After some time, it may become impossible to do so without damaging the material.
14. It is recommended that end laps be staggered a minimum of 18" from the preceding course.
15. The Underlayment is to be back nailed along the head lap. The nails shall be, 11 gauge 1 1/2" approved ring shank type applied with a minimum of a 1 1/2" approved tin cap or approved capnail as required per the High Velocity Hurricane Zone (HVHZ) section of the FBC, at a minimum rate of 9" o.c. The head lap of the preceding layer of underlayment is to cover the area being back nailed.
16. Roll or broom the entire membrane surface paying special attention to all overlap areas "side laps, end laps, T-joints" to ensure adhesion with acceptable substrates. A minimum of a 28 lb weighted roller may be used for steep slope applications. The use of a soft bristled push broom is acceptable on steeper slopes. The above mentioned procedures are necessary in order to apply uniform pressure and allow for contact of the membranes.
17. Apply 1/8" thick uniform layer of SBS trowel grade modified bitumen asphalt adhesive / flashing cement throughout the contact area of the 6" granule over granule and fabric over fabric end laps. Once the aforementioned procedure has been completed, the membrane must then be hand rolled in place in order to ensure contact of membrane and achieve a minimum of 1/8" asphaltic bleed out in designated area.

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18. SRS TopShield Ice & Water G300 self adhering underlayment shall be applied to protrusions, slope changes, valleys, curbs, and other roof top penetrations before any other sections of the roof.
19. When applying the underlayment in the valley, start at the low point and work to the high point, rolling the membrane from the center outward in each direction.
20. For ridge applications, center the underlayment and roll from the center outward in both directions.
21. Flash vent pipes, stacks, chimneys and penetrations in compliance with Roof Assembly current Product Control Notice of Acceptance and applicable Building Code.
22. All protrusions or drains shall be initially taped with a 6" piece of like kind membrane. The flashing tape shall be pressed in place and formed around the protrusion to ensure a tight fit. A second layer of like kind membrane shall be applied over the flashing detail.

**GENERAL LIMITATIONS –SRS TopShield Ice & Water G300 SELF-ADHERED UNDERLAYMENT:**

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code.
3. SRS TopShield Ice & Water G300 self adhering underlayment shall be applied only when material interface temperatures are 40° F and rising.
4. SRS TopShield Ice & Water G300 self-adhered underlayment shall not be installed when any form of moisture such as water, dew, rain, etc. is present on the substrate.
5. SRS TopShield Ice & Water G300 self-adhered underlayment is to be applied to a smooth, clean and dry surface, with the deck free from irregularities.
6. Ensure roof has positive drainage prior to installation of SRS TopShield Ice & Water G300 self-adhered underlayment.
7. SRS TopShield Ice & Water G300 self-adhered underlayment shall not be applied over a pre-existing roof membrane or system.
9. Care should be taken during the loading procedure to keep foot traffic to a minimum and avoid dropping the roof covering directly on the underlayment.
10. SRS TopShield Ice & Water G300 shall not be left exposed as a temporary roof for longer than 30 days after application. The manufacturer reserves the right to change product exposure period at any time; not to exceed the preceding maximum time limitations.

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11. If SRS TopShield Ice & Water G300 self-adhered underlayment or the ASTM standards are not listed, a request may be made to the Authority Having Jurisdiction (AHJ) or the Miami-Dade County Product Control Department for approval provided that appropriate documentation is provided to detail compatibility of the product, wind uplift resistance, and fire testing results.
12. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

**MANUFACTURER'S CONSIDERATIONS:**

1. Code body requirements supersede manufacturer's recommendations and installation guidelines.

**BUILDING PERMIT REQUIREMENTS:**

Application for building permit shall be accompanied by copies of the following:

1. This Notice of Acceptance.
2. Any other documents required by the Building Official or applicable building code in order to properly evaluate the installation of these materials.

**LABELING:**

All membranes or packaging shall bear the imprint or identifiable marking of the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade County Product Control Seal as shown below.

**MIAMI-DADE COUNTY**  
APPROVED**END OF THIS ACCEPTANCE**





DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
BOARD AND CODE ADMINISTRATION DIVISION

## NOTICE OF ACCEPTANCE (NOA)

DuPont de Nemours, Inc.  
1501 Larkin Center Drive  
Midland, MI 48642

### 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 RER - 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. RER 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: DuPont Tyvek Roof Protector Underlayment

**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 NOA consists of pages 1 through 3.

The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-25-99  
www.miamidade.gov/pera

## ROOFING COMPONENT APPROVAL

**Category:** Roofing  
**Sub-Category:** Underlayment  
**Material:** Polypropylene

### SCOPE:

This approves the DuPont Tyvek Roof Protector Underlayment, as described in this Notice of Acceptance; designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

### PRODUCT DESCRIPTION:

Product	Dimensions	Test Specification	Product Description
DuPont Tyvek Roof Protector (Manufacturing location #1)	48" x 250' rolls & 42" x 286' rolls	ASTM D 226 Type I & II	polymer-based scrim-reinforced roofing underlayment, consisting of woven polyolefin base with a layer of nonwoven polyolefin sheet and a polymer coating on the back side, with a nominal unit weight of 2.25 lbs./square.

### EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Test Name/Report	Date
NEMO ETC, LLC	4J-ACT-21-SSUDL-01.A	ASTM D 226	05/24/21

### MANUFACTURING LOCATION:

1. Dadra, India

### APPROVED ASSEMBLIES:

<b>Deck Type 1:</b>	Wood, Non-Insulated
<b>Deck Description:</b>	3/4" or greater plywood or wood plank
<b>System E(1):</b>	Anchor Sheet mechanically fastened to deck
<b>Anchor Sheet:</b>	One or more plies of DuPont Tyvek Roof Protector underlayment, with a minimum 4" wide headlap and a minimum 8" wide end lap, mechanically fastened to deck with approved nails and tin caps 6" o.c. minimum at all laps and three staggered rows fastened in a minimum 12" o.c. equally spaced grid pattern in the field of the roll.
<b>Surfacing:</b>	Shall be acceptable for use in approved asphaltic shingles, wood shakes, wood shingles, non-structural metal roofing, and quarry slate. Must comply with applicable Roofing Application Standards and Building Codes.



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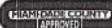
## BUILDING PERMIT REQUIREMENTS:

Application for building permit shall be accompanied by copies of the following:

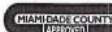
1. This Notice of Acceptance.
2. Any other documents required by the Building Official or applicable building code in order to properly evaluate the installation of this material.

## LIMITATIONS:

1. Fire classification is not part of this acceptance.
2. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code.
3. DuPont Tyvek Roof Protector Underlayment shall be applied to a clean and dry surface.
4. DuPont Tyvek Roof Protector Underlayment may be used with any approved roof covering Notice of Acceptance listing DuPont Tyvek Roof Protector Underlayment as a component part of an assembly in the Notice of Acceptance. If DuPont Tyvek Roof Protector Underlayment is not listed; a request may be made to the Authority Having Jurisdiction (AHJ) or the Miami-Dade County Product Control Department for approval provided that appropriate documentation is provided to detail compatibility of the products, wind uplift resistance, and fire testing results.
5. DuPont Tyvek Roof Protector Underlayment shall not be used on slopes less than 2:12. In general, on slopes less than 4:12, a double layer is recommended. Double layer application is best achieved by using 19" side laps, making sure the side laps are "shingled in" to shed water.
6. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.
7. DuPont Tyvek Roof Protector Underlayment shall not be left exposed as a temporary roof for longer than 30 days after application.
8. The manufacturer reserves the right to change product exposure period at any time; not to exceed the preceding maximum time limitations.
9. All packaging shall bear the imprint or identifiable marking of the manufacturer's name or logo and a yellow line in the center of the roll to identify the ASTM Standard designation or the Miami-Dade County Product Control Seal as shown below.



END OF THIS ACCEPTANCE



NOA No.: 21-0617.05  
Expiration Date: 06/10/26  
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## Application Instructions

Before installing this product, check local building codes for their roofing requirements.

These shingles are designed for new or re-roofing work OVER any properly built and supported wood roof deck having adequate nail holding capacity and a smooth surface. Check local building codes.

### Precautionary Note:

The manufacturer will not be responsible for problems resulting from any deviation from the recommended application instructions and the following precautions:

**Roof Top Loading:** Lay shingle bundles flat. Do not bend over the ridge.

**Roof Deck:** • 6" Minimum roof deck boards • Minimum 3/4" plywood • Minimum 24 O.S.D.

Regardless of deck type used, the roofing installer must:

1. Install the deck material in strict compliance with the deck manufacturer's instructions.
2. Prevent the deck from getting wet before, during and after installation.

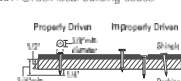
**Eave Flashing:** Use Owens Corning® self-sealing ice and water barrier on the eaves in all regions of the country where roofs are susceptible to leaks from ice and water backup.

**Ventilation:** Must meet local building codes.

**Handling:** Use extra care in handling shingles when the temperature is below 40°F.

**Storage:** Store in a covered ventilated area at a maximum temperature of 110°F. Bundles should be stacked flat. Protect shingles from weather when stored at the job site. Do not store near steam pipes, radiators, etc.

**Fastener requirement:** Use galvanized steel, stainless steel, or aluminum nails minimum 12 gauge shank with 3/8" diameter head. Owens Corning Roofing recommends that fasteners comply with ASTM F 1667. Check local building codes.



All Fasteners must penetrate at least 3/8" into the wood deck or completely through sheathing.

**Notice:** Owens Corning Roofing recommends the use of nails as the preferred method of attaching shingles to wood decking or other nailable surface.

## Instrucciones de aplicación

Antes de colocar este producto, verifique los códigos locales de construcción para conocer los requisitos de su techo.

Estas tejas han sido diseñadas para la construcción de techos nuevos o el arreglo de techos existentes sobre plataformas de madera correctamente construidas y que poseen una capacidad de sujeción de clavos y una superficie lisa. Consulte los códigos de construcción locales.

### Aviso importante:

El fabricante no se hará responsable por los problemas que surjan como consecuencia de no seguir exactamente las instrucciones de instalación recomendadas y de los siguientes avisos importantes:

**Carga sobre los techos:** Coloque los paquetes de tejas de manera plana sobre el techo. No los doble sobre la cumbrera.

**Plataforma del techo:** • 6 pulgadas de mínimo sobre la estructura base del techo • 2 pulg. como mínimo de madera triplay • 3/4 pulg. como mínimo para paneles de fibra orientada. Cualquiera que sea el tipo de superficie utilice, el instalador del techo debe:

1. Instalar el material de la plataforma siguiendo estrictamente las instrucciones del fabricante.

2. Evitar que la plataforma se moje antes, durante y después de la instalación.

**Tapajuntas para aleros:** Utilice la barrera auto sellante resistente al agua y al hielo de Owens Corning en los aleros de todas las regiones del país en las que los techos estén expuestos a filtraciones por causa de la acumulación de agua y hielo.

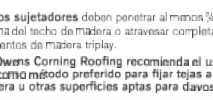
**Ventilación:** Debe cumplir con los códigos de construcción locales. **Uso:** Tenga mucho cuidado al usar y colocar las tejas cuando la temperatura sea inferior a los 40°F.

**Almacenamiento:** Almacene en un área cubierta y ventilada a una temperatura que no sobrepase los 110°F/43°C. Almacénar en forma plana. Proteja las tejas del clima cuando las almacene en el lugar de trabajo. No las almacene cerca de tuberías de vapor, radiadores, etc.

**Requisito de sujetador:** Use clavos de acero galvanizado, acero inoxidable o de aluminio, de calibre 12 como mínimo, con un diámetro de cabeza de 3/8 pulg. Owens Corning Roofing recomienda que los sujetadores cumplan con la norma ASTM F 1667. Consulte los códigos de construcción locales.

**Diagrama de fijación:** El diagrama muestra la fijación correcta de las tejas. Los sujetadores deben penetrar al menos 3/8 pulg. en la plataforma del techo de madera o a través completamente los revestimientos de madera triplay.

**Aviso:** Owens Corning Roofing recomienda el uso de clavos como método preferido para fijar tejas a superficies de madera u otras superficies aptas para clavos.



### CAUTION

**ROOF SURFACES MAY BE SLIPPERY:** Especially when wet or icy. Use a fall protection system when installing. Wear rubber soled shoes. Walk with care.

**FALLING HAZARD:** Secure area below work and materials on roof. Unsecured materials may slide on roof. Place on level plane or secure to prevent sliding. Wear a hard hat.

**WARNING:** The product contains a chemical known to the State of California to cause cancer.

### CUIDADO

**EL TECHO PUEDE ESTAR RESBALOSO:** Especialmente cuando está mojado o cubierto de hielo. Al instalar, utilice un sistema de protección contra las caídas. Utilice zapatos con suela de goma. Camine con cuidado.

**PELIGRO DE CAÍDA DE OBJETOS:** Asegure el área que se encuentra debajo de la zona de trabajo y los materiales que están sobre el techo. Los materiales que no estén sujetos pueden caerle al techo. Coloque en un lugar sin pendiente o sujetelos para que no se caigan. Use un casco resistente.

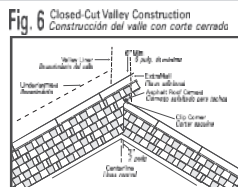
**ADVERTENCIA:** Este producto contiene una sustancia química considerada cancerígena en el estado de California.

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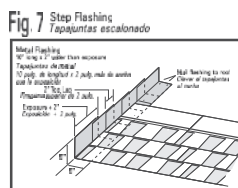


**6 Valley Construction:**  
**Closed-Cut Valley** See Fig. 6  
A closed-cut valley can be used as an alternative to woven and open valley and is applied as follows:  
Lay a 36" wide valley liner of self-adhesive membrane underlayment or equivalent. A 36" wide minimum 60 lb. smooth surface roll roofing can also be used as a valley liner. Lay all shingles on one side of valley and across center line of valley a minimum of 12". Fasten a minimum of 6" away from center line on each side of valley. Strike a chalk line 2" from the center line of the unshingled side. Apply shingles on the unshingled side up to the chalk line and trim, taking care not to cut the underlying shingles. Clip upper corners of these shingles, cement and fasten. Both woven and metal valleys are acceptable alternatives.



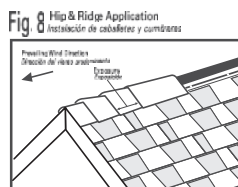
**6 Construcción del valle:**  
**Valle cerrado** Ver la Fig. 6.  
Un valle con corte cerrado puede ser usado como alternativa a un valle tejido o abierto y se coloca de la siguiente manera:  
Coloque en el valle un impermeabilizante autoadhesivo o equivalente con 36 pulg. de ancho. Para revestir el valle, también se puede utilizar un rollo de techado de 36 pulg. de ancho y un mínimo de 60 libras. Coloque todas las tejas sobre un lado del valle y a través de la línea central del valle al menos 12 pulg. Suelte a un mínimo de 6 pulg. de la línea central a cada lado del valle. Marque una línea de tiza a 2 pulg. de la línea central del lado que no tiene tejas. Coloque las tejas del lado que no tiene tejas hasta la línea de tiza y recorte, con cuidado de no cortar las tejas que se encuentran debajo. Una los extremos superiores de estas tejas, cómpleso cemento y sujete. Se pueden utilizar valles de tejido o metal.

**7 Step Flashing:**  
Use 10" long and 2" wide than expected exposure corrosion-resistant metal where roof planes butt against vertical sidewalls or chimneys. See Fig. 7



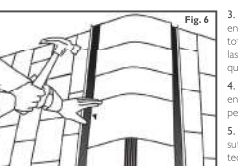
**7 Revestimiento escalonado:**  
Utilice metal resistente a la corrosión con una exposición de 10 pulg. de longitud y de 2 pulg. más de ancho que la exposición esperada en los puntos en los que los planos del techo se unan a las paredes laterales verticales o a chimeneas. Ver la Fig. 7.

**8 Hip & Ridge Application:**  
Use corresponding Owens Corning® Hip & Ridge shingles to best complement shingle color. Follow specific application instructions as printed on the Hip & Ridge shingle package. See Fig. 8

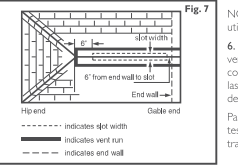


**8 Aplicación para caballete y cumbrera**  
Utilice Owens Corning® tejas para caballetes y cumbreras. Siga las instrucciones de instalación del paquete de caballete y cumbrera. Ver la Fig. 8.

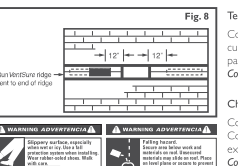
6. Nail hip and ridge shingle over the vent using nails long enough to meet the penetration requirements of the shingle manufacturer or use nails provided with the VentSure ridge vent. For a clean look, extend the hip and ridge shingle to cover the interlocking tabs or trim tabs off using a utility knife. See Fig. 6.



3. Centre the respirador sobre la apertura realizada en la cumbrera asegurándose de que apoye totalmente sobre el techo. También asegúrese de que las aletas de traba estén en la dirección opuesta a la que está colocando la ventilación. Consulte la Fig. 3.  
4. Al instalar los respiradores, asegúrese de que encajen y atornillelos utilizando los orificios perforados en cada uno de ellos. Consulte la Fig. 4.  
5. Con un cutter corte el tramo final a un largo suficiente para que quede alineado con el borde del techo. Asegúrese de que las cofas integradas queden expuestas y fije con clavos. Consulte la Fig. 5.



NOTA: En la mayoría de los casos, no es necesario utilizar la traba para la última pieza.  
6. Fije las tejas para lima tesa y cumbrera sobre la ventilación con clavos con una longitud que coincida con los requisitos de penetración del fabricante de las tejas o con los clavos provistos junto al respirador de cumbrera VentSure. Consulte la Fig. 6.  
Para una apariencia profesional, extienda la teja para lima tesa y cumbrera de manera que cubra las aletas de traba o córtelas con un cutter.



**Techos a dos aguas y con lima tesa.**  
Corte ranuras de 1 pulgada a ambos lados de la cumbrera a una distancia de hasta 6 pulgadas de la pared o intersección con la lima tesa. Consulte la Fig. 7.



**Chimeneas**  
Cortar las ranuras a 12 pulgadas de la chimenea. Coloque el respirador de cumbrera desde el extremo del techo hasta tocar la chimenea. Consulte la Fig. 8.



NOTA: La garantía escrita de Owens Corning para este producto no se aplica en casos en que el producto no se haya instalado de acuerdo con las instrucciones aquí mencionadas. Consulte la garantía para conocer los detalles adicionales.

**GARANTÍA LIMITADA** Este producto está cubierto por una Garantía Limitada, la cual está disponible llamando al 1-800-GET-PINK® o visitando nuestro sitio web en [www.owenscorning.com](http://www.owenscorning.com).

ESA GARANTÍA CONSTITUYE NUESTRA GARANTÍA EXCLUSIVA Y POR LA PRESENTE SE RECHAZAN TODAS LAS DEMÁS GARANTÍAS, EXPRESAS O IMPLÍCITAS, INCLUYENDO LAS GARANTÍAS IMPLÍCITAS DE COMERCIABILIDAD E IDONEIDAD PARA UN PROPÓSITO PARTICULAR. EN NINGÚN CASO OWENS CORNING SERÁ RESPONSABLE ANTE EL CLIENTE POR DAÑOS INCIDENTALES, INDIRECTOS O CONSECUENTES.

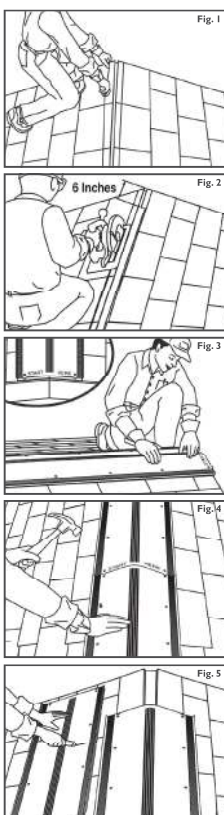
# VentSure® 4-Foot Strip Heat & Moisture Ridge Vents Installation Instructions

**Owens Corning VentSure® 4' Strip Heat & Moisture Ridge Vent**  
VentSure® 4' Strip Ridge Vents are designed for roofs with slopes of 3/12 to 16/12 pitches.  
Intake at the eave vents should be equal to or exceed that of the ridge vent being installed. VentSure ridge vent is designed for residential applications.

- IMPORTANT NOTES:**
- On architectural shingles, roofing cement should be used where the roof vent lower edge meets the laminate shingle to prevent wind-driven rain or snow to blow under the ridge vent.
  - Before applying vent to architectural shingles on new construction, leave felt long at ridge and fold back under vent or caulk between low areas of shingle and flange of vent making sure you don't plug holes.
  - See instructions for cutting slot.
  - For structures with different ridge heights, be sure to vent the higher ridge. It is also acceptable to vent lower ridges with domers.
  - For best appearance, run VentSure ridge vent from end to end to give the roof a more attractive appearance.
  - For truss rafters, cut a 1" slot on each side of the ridge starting a minimum of 6" from the rake edge of the roof. For roofs with a center pole, cut a 1 1/2" slot on each side of the ridge starting a minimum of 6" from the rake edge of the roof.

- Installation Instructions**
- Using a chalk line, mark out 1" on both sides of the ridge as a guide for cutting a slot in the top of the ridge. See Fig. 1.
  - Cut slot using a circular saw with the blade set at a depth to cut through the wood sheathing only. See Fig. 2.
  - NOTE: Start the cut 6" from the edge of the roof. Remove the sheathing debris from slot.
  - Center the vent over the opening that has been cut in the ridge, ensuring the vent sits flat on the roof. Also ensure that the interlocking tabs are facing the opposite direction you will be installing the next piece of ridge vent. See Fig. 3.
  - As you install the vents, ensure each vent is snapped together then nail in place using the nail holes marked on each vent. See Fig. 4.
  - Using a utility knife, cut the final piece to a length long enough so that it is flush with the edge of the roof. Connect making sure that the built-in end caps are exposed and nail in place. See Fig. 5.

NOTE: In most cases, the final piece will not use the interlocking feature.



**Ventilación de Cumbreras VentSure® en Tira de 4 Pies**  
**Para la Eliminación del Calor y la Humedad**  
Las ventilaciones de cumbrera VentSure® de 4 pies están diseñadas para pendientes con inclinaciones de 3/12 a 16/12.  
La entrada de los respiradores de los aleros deberá ser igual o mayor a la del respiradero para cumbrera que se está instalando. Los respiradores de cumbrera VentSure se han diseñado para aplicaciones residenciales.

- IMPORTANTE:**
- Sobre las tejas arquitectónicas debe aplicarse adhesivo para techados en la unión entre el borde inferior del respiradero del techo y la teja laminada para evitar que se introduzcan lluvia o nieve bajo la cumbrera por la acción del viento.
  - Antes de colocar un respiradero sobre tejas arquitectónicas en una nueva construcción, deje un excedente de fieltro sobre la cumbrera y dóblelo introduciéndolo debajo del respiradero, o selle los espacios entre las áreas bajas de la teja y el ala del respiradero asegurándose de no obstruir orificios.
  - Consulte las instrucciones para saber cómo realizar el corte de la ranura.
  - En el caso de estructuras con cumbreras a diferentes alturas, ventile la cumbrera más alta; también es aceptable ventilar las cumbreras más bajas con buhardillas.
  - Para mayor estética, coloque el respiradero de cumbrera VentSure de una punta a otra para darle al techo un aspecto más atractivo.
  - En el caso de los cabios del armazón, corte una ranura de 1 pulgada a cada lado de la cumbrera comenzando a un mínimo de 6 pulgadas de la cornisa del timpano del techo. En el caso de techos con un poste central, corte una ranura de 1 1/2 pulgada a cada lado de la cumbrera comenzando a un mínimo de 6 pulgadas de la cornisa del timpano del techo.

- Instrucciones de instalación**
- Trace líneas con tiza de modo de dejar 1 pulgada de cada lado de la cumbrera y utilízarlas como guía para cortar una ranura en su parte superior. Consulte la Fig. 1.
  - Abrá la ranura con una sierra circular introduciendo la teja a una profundidad suficiente para cortar solamente el revestimiento de madera. Consulte la Fig. 2.

NOTA: Comience a cortar a 6 pulgadas desde el borde del techo. Limpie los vestigios del revestimiento de la ranura.

# ProEdge® Hip & Ridge Shingle Installation Instruction

Complete shingle application on roof deck before applying hip and ridge shingles. Hip shingles must be applied before ridge shingles. Note: If a new roof is being applied over an existing roof, remove the old hip and ridge shingles to obtain a level application. Each shingle is perforated for separation into three Hip & Ridge shingles.  
**Precautionary Notes:** The manufacturer will not be responsible for problems resulting from any deviation from the recommended application instructions and the following precautions.

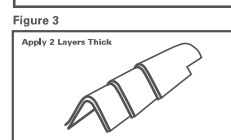
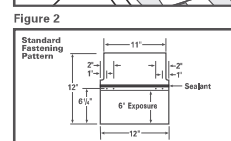
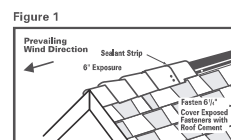
- (A) Handling:** Use extra care in handling shingles when the temperature is below 40°F (5°C). DO NOT drop bundles. Shingles can be broken easily in cold weather or their edges damaged in hot weather. DO NOT attempt to separate shingles by "breaking" them over another object such as a ridge.  
**(B) Fastener requirement:** Use galvanized steel, stainless steel, or aluminum nails minimum 12 gauge shank with 3/8" diameter head. Owens Corning® recommends that fasteners comply with ASTM F 1667. Check local building codes. All fasteners must penetrate at least 3/4" into the wood deck or completely through plywood or OSB sheathing.  
**(C) Fastening:** Drive all fasteners until they are flush with the surface of the shingle. Special care must be taken when using pneumatic nail guns. Nails are to be driven straight; so the entire head is flush against the shingle but does not cut the shingle surface. An improperly adjusted pneumatic gun can result in raised fasteners causing sealing failure, raised tabs, leaks, or blow-off. Place fasteners 6 1/4" from the exposed edge of the shingle. Do not apply fasteners in the sealant strip.

- (D) Storage:** Store in a covered, ventilated area at maximum temperature of 110°F (43°C). Stack in a flat fashion (maximum of 24 bundles high). Protect shingles from weather when stored at the job site. Do not store near steam pipes, radiators, etc.  
**(E) All exposed material must be rated Class A by Underwriters Laboratories, to maintain a Class A system.**

- Hip & Ridge Application**
- Apply Hip & Ridge as shown, bending them over the hip or ridge lengthwise.
  - Apply ridge after hips have been applied, beginning on end of ridge opposite prevailing wind direction. See Fig. 1.
  - Apply shingles with 6" exposure.
  - Fasten each shingle with 2 fasteners on each side, 1 inch and 2 inches from the edge and 6 1/4 inch from the exposed end. See Fig. 2.
  - Apply remaining hip and ridge shingles in the same manner with a 6 inch exposure.
  - When finishing the ridge, leave no headlap portion of the last hip and ridge shingle exposed. One option is to use the 6 inch exposed portion of a hip and ridge shingle, cutting a piece the appropriate length to extend over the headlap portion of the shingle to the end of the ridge.
  - Fasten final piece with four nails, each 1 inch and 2 inches in from each side edge and 1 inch in from the end of the ridge. Cover exposed fasteners with asphalt roof cement. Asphalt roof cement must meet ASTM D-4586 Type I or Type II (Asbestos Free).

**Installing Double Hip & Ridge**  
Applying a double layer of shingles to hips or ridges is easy to do and creates a more aesthetically pleasing appearance. Simply

install the shingles using the method described above, but fasten two shingles simultaneously — one on top of the other. Make sure fasteners are long enough to penetrate through both layers of shingle and completely through the roof deck. See Fig. 3



**CAUTION: DO NOT MIX MATERIAL BEARING DIFFERENT LOT NUMBERS. REFER TO THE LOT NUMBERS LOCATED ON THE SIDE OF THE BUNDLE.**

**LIMITED WARRANTY** This product is covered by a Limited Warranty which is available by calling 1-800-GET-PINK® or visiting our Web site at [www.owenscorning.com](http://www.owenscorning.com).  
THAT WARRANTY CONSTITUTES OUR EXCLUSIVE WARRANTY AND WE HEREBY DISCLAIM ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL OWENS CORNING BE LIABLE TO CUSTOMER FOR INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES.





## ProEdge™ Hip & Ridge Shingle

### Instrucciones de instalación

Complete la aplicación de las tejas sobre la plataforma del techo antes de aplicar las tejas de caballete y cumbrera. Las tejas de caballete deben aplicarse antes que las tejas de cumbrera.

**Nota:** Si se aplica un nuevo techo sobre otro existente, quite las tejas de caballete y cumbrera viejas para obtener una aplicación nivelada. Cada teja esta perforada para separarla en tres tejas de caballete y cumbrera.

**Notas de precaución:**  
El fabricante no se hará responsable por los problemas que surjan como consecuencia de no seguir exactamente las instrucciones de instalación recomendadas y los siguientes avisos importantes.

(A) **Uso:** Tenga mucho cuidado al usar y colocar las tejas cuando la temperatura sea inferior a los 40°F (5°C). NO DEJE CAER los paquetes. Las tejas pueden romperse fácilmente en el clima frío o sus bordes pueden dañarse en el clima caliente. NO intente separar las tejas rompiéndolas sobre otro objeto como una cumbrera.

(B) **Requisito de sujetador:** Use clavos de acero galvanizado, acero inoxidable o de aluminio, de calibre 12 como mínimo, con un diámetro de cabeza de 3/8 pulg. Owens Corning® recomienda que los sujetadores cumplan con la norma ASTM F 1667. Consulte los códigos de construcción locales. Todos los sujetadores deben penetrar al menos 1/4 pulg. en la plataforma del techo de madera o a través completamente los revestimientos de madera triplay o de madera orientada (OSB).

(C) **Aplicación de sujetadores:** Coloque todos los sujetadores hasta que estén a nivel de la superficie de la teja. Debe tener mucho cuidado cuando utiliza pistolas neumáticas. Los clavos deben colocarse de manera recta de modo que la cabeza quede nivelada contra la teja pero sin cortar la superficie de la teja. Una pistola neumática incorrectamente calibrada puede hacer que los sujetadores queden levantados y se pierda el sellado, o se levanten las lengüetas y se produzcan filtraciones y voladuras de tejas. Coloque los sujetadores a 6 1/4 pulg. del extremo inferior. No aplique sujetadores en la tira de sellador.

(D) **Almacenamiento:** Almacene en un área cubierta y ventilada a una temperatura que no sobrepase los 110°F (43°C). Apile de manera horizontal (hasta 24 paquetes máximo). Proteja las tejas del clima cuando las almacene en el lugar de trabajo. No las almacene cerca de tuberías de vapor, radiadores, etc.

(E) **Todo el material expuesto debe calificarse como Clase A por Underwriters Laboratories, para mantener el sistema Clase A.**

#### Instalación de las tejas de caballete y cumbrera

1. Aplique las tejas de caballete y cumbrera como se muestra, doblándolas sobre el caballete o la cumbrera a lo largo.

2. Aplique las tejas de cumbrera después de que se hayan instalado las tejas de caballete, comenzando por el extremo de la cumbrera opuesto a la dirección del viento predominante. Ver la Fig. 1

3. Aplique las tejas con 6 pulg. de exposición, como se muestra.

4. Sujete cada teja con 2 sujetadores a cada lado, a 1 pulgada y a 2 pulgadas de distancia del borde y a 6 pulgadas del extremo expuesto. Ver la Fig. 2

5. Aplique el resto de las tejas de caballete y cumbrera de la misma manera, con una exposición de 6 pulgadas.

6. Cuando haya terminado con la cumbrera, no deje ningún área para superponer expuesta en la última teja de caballete y cumbrera. Una opción es usar la porción expuesta de 6 pulgadas de la teja de caballete y cumbrera, cortando un pedazo que tenga la longitud apropiada y que se extienda sobre la porción de superposición de la teja hasta el extremo de la cumbrera.

7. Sujete la pieza final con cuatro clavos, cada uno a 1 pulgada y a 2 pulgadas hacia adentro desde cada costado del borde y a 1 pulgada hacia adentro desde el borde de la cumbrera. Cubra con cemento asfáltico los sujetadores expuestos. El cemento asfáltico debe cumplir con la norma ASTM D-4586 Tipo I 6 Tipo II (sin asbestos).

#### Instalación de tejas de caballete y cumbrera dobles

Aplique una capa doble de tejas para caballetes y cumbreras es fácil y crea una apariencia más estética y agradable. Simplemente instale las tejas usando el método que se describe anteriormente, pero sujete las dos tejas simultáneamente una sobre la otra. Asegúrese de que los sujetadores son lo suficientemente largos para penetrar ambas capas de tejas y la plataforma del techo completamente. Ver la Fig. 3

Figura 1



Figura 2

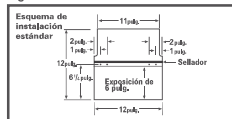
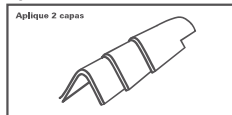


Figura 3



**PRECAUCIÓN:** NO MEZCLE MATERIAL QUE PRESENTE DIFERENTES NÚMEROS DE LOTE. CONSULTE LOS NÚMEROS DE LOTE UBICADOS AL COSTADO DEL PAQUETE.

OWENS CORNING ROOFING AND ASPHALT, LLC  
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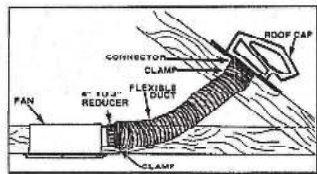
Num. de Pub. 10017200-C, Impreso en EE. UU., marzo 2020. THE PINK PANTHER™ y ©1996-2020 Mirco-Galvin/Mayer Studios Inc. Todos los derechos reservados. El color PINK es una marca comercial registrada de Owens Corning. © 2020 Owens Corning. Todos los derechos reservados.

## ROOF VENT KIT

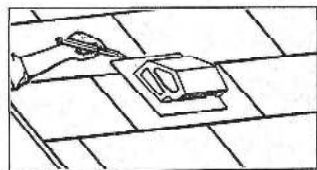
### INSTALLATION INSTRUCTIONS

Plan installation carefully. Roof cap will accept 3" or 4" round duct. Tape all joints with duct tape to prevent air and water leaks.

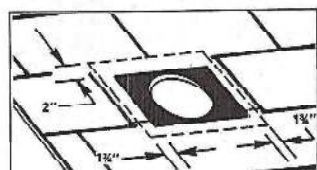
**NOTE: DO NOT INSTALL THE ROOF CAP ON A FLAT ROOF.**



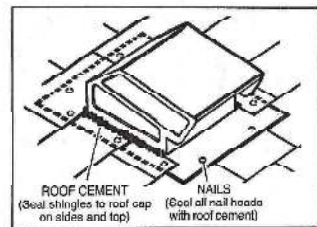
1. Cut a 5" diameter hole through roof boards and shingles.  
2. Insert 4" metal duct connector into opening in bottom of roof cap.  
3. Insert duct connector/roof cap assembly into hole in roof.



4. Trace outline of roof flange onto shingles.

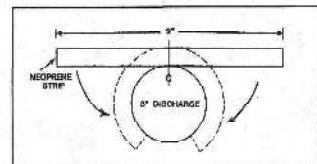


5. Trim shingles as shown, so they will fit snugly around hood of roof cap when installed. Seal all around duct with roof cement.  
6. Slide 4" hose clamp over end of flexible hose and attach hose to connector. Tighten clamp securely.  
7. Insert hose and connector into hole in roof.



8. Carefully lift shingles and slide back flange of roof cap under shingles. Nail flange to roof under shingles at top and bottom.  
9. Use roof cement to seal shingles to top and sides of roof cap. Seal all nail heads with roof cement as well.

**NOTE:** Use as short a duct run as possible, for best fan performance. If the 8-foot length is more than needed, cut hose to desired length.



10. Slide hose clamp over free end of hose and fasten hose to fan discharge collar.

**NOTE:** If discharge collar on fan is 3" diameter, use the neoprene strip to increase the diameter to 4".

To install the neoprene strip:  
1. Center it on the top of the discharge collar.  
2. Remove the paper backing.  
3. Smoothly wrap it around the discharge collar so that the pressure-sensitive adhesive holds it in place.

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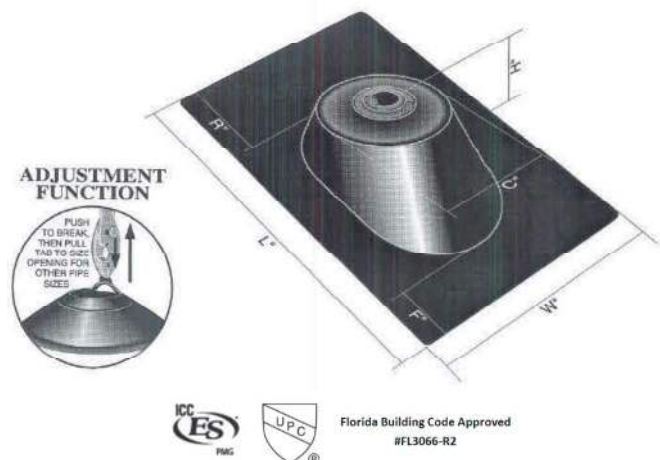
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## Hard Base—Multi-Size Roof Flashing

### SPECIFICATION:

Furnish and install hard plastic base roof vent flashing with adjustable, multi-size elastomer collar. Unit shall be Water-Tite item number checked below as manufactured by IPS Corporation, as per corresponding dimensional characteristics, or equivalent. (Do not use Petroleum based mastics, sealing compounds, or paints on collar portion of all flashings, on all hardbase, flexible, or rain collars.)

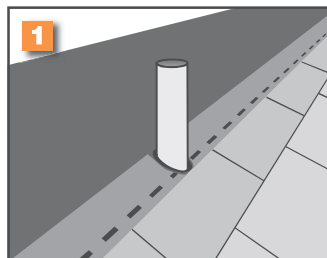


Product Code	Model	Vent Size	Dim. W	Dim. L	Dim. R	Dim. F	Dim. C	Dim. H
81700	HB31	1 1/4" - 3"	11 1/4"	15"	3 1/2"	2 1/2"	5 3/10"	2 3/4"
81709	HB41	1 1/4" - 4"	12"	15 1/4"	3 3/8"	2 1/2"	6 3/4"	2 9/10"

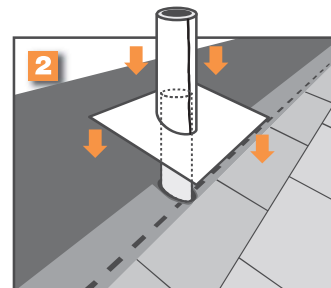


## INSTALLATION GUIDELINES

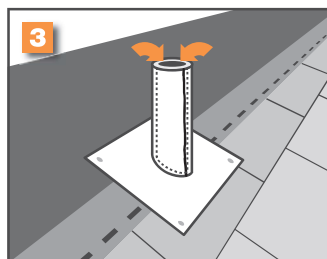
### LEAD PIPE FLASHING



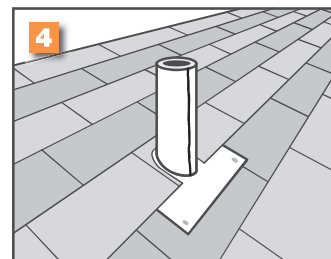
1. Shingle up to the roof penetration.



2. Slide flashing over the vent pipe and secure with roofing nails. The lead pipe flashing should be at least 1.5" taller than the exposed vent pipe.



3. Roll the top of the lead pipe flashing into the vent pipe to create a long lasting water resistant seal that is finished in appearance.



4. Continue shingling above the vent pipe. Apply roofing mastic to the top of the flange before installing upper side shingles.



#### CAUTION!

Working above grade is inherently dangerous, be sure that proper fall protection measures are in place. When working with power tools and sheet metal, gloves and eye protection are absolutely required.

These basic installation guidelines are for use with typical or standard applications. It is always recommended to seek advice from a licensed professional, and to check with your local building inspector or building permit office for approvals and possible variations that may apply.



**NEW**

# Electrical Mast Roof Flashing

## One Piece Construction for Easy, Secure Installation



The new **IPS Electrical Mast Roof Flashing** simplifies the replacement of deteriorating flashings around electrical masts on shingle roofing. The new split-boot, one piece design eliminates the guess work of cutting and sealing standard flashing and the need to unhook power lines saving you time and money.

### Features:

- Constructed of durable EPDM rubber
- Flashing base is reinforced with strong, rigid galvanized mesh
- 20 year warranty
- Manufactured in an ISO9001 registered factory
- Exceeds Dade County Chapter 15 flashing requirements

**NEW**



Product Code #	Description	Model Number	UPC	Units/Case
81746	Electrical Mast Roof Flashing, 0 to 3 3/8"	EFB1	012181-817469	15

## Installation Instructions

1. Apply shingles up to lower edge of electrical mast.
2. Cut flashing opening to appropriate size for pipe.
3. Wrap flashing around electrical mast and close by crimping stainless steel clips (*supplied*).
4. Apply sealant to underside of base and secure base with roofing nails.
5. Apply sealant around the top of the electrical mast flashing where it meets the pipe, and along the joiner seam.
6. Finish applying shingles over sides and upper portion of electrical flashing base.

### NOTE:

When properly installed, the lower approximately one-third of the base will be on top of shingles while the upper approximately two-thirds of the base will be covered by shingles as shown.



**MILLENNIUM  
METALS, INC.**

10200 Eastport Road Jacksonville, FL 32218  
877-358-7663

## Off Ridge Vent Installation (with or without detachable baffle)

### A. Preparation

To prepare roof for installation it will be necessary to determine how many and what type of vents will be needed for the project.

Off Ridge Ventilation should be installed as evenly as possible across the roof section. The roof vent should be installed a minimum of 6" off the peak of the ridge. Cut out sizes are located below in **Table 1-1**.

### IMPORTANT NOTE: DO NOT CUT INTO RAFTERS OR TRUSSES.

When installing vents on an existing shingle roof remove shingles from the sides and top of the opening. Remove any nails that interfere with installing the vent. This typically includes nails that are to be 3" within the body of the vent. Shingles and existing nails should remain on the bottom slope up to the cut opening.

Roof cement is necessary around the perimeter of the underside of the vent to seal it to the underlayment or shingles. The cement should also be installed on the vent completely cover back and side flanges. The cement should be 1/4" thick and should extend 2" onto the underlayment. The lower portion of the vent should already have shingles installed up to the cut opening. The lower portion of the vent should sit on the roof cement. Shingles should be installed on the back and side flanges of the vent. All nail areas should be covered with cement.

### B. Opening & Positioning

The cut opening should be positioned a minimum of 10" from the back flange. This allows a minimum clearance of 2-1/2" from the roof to the top of the vent. The vent should be centered horizontally over the opening.

Length	Net Free Area (sq in)	Cut Out Size
4'	115	46" x 2-1/2"
6'	175	70" x 2-1/2"
8'	235	94" x 2-1/2"
10'	295	118" x 2-1/2"

Table 1-1

### C. Fastening of the Off Ridge Vent

- 1) If using detachable baffle, attach the baffle by sliding it onto the lower flange of roof vent. Care should be taken to see it is flush with front flange of vent. Secure as indicated on drawing.
- 2) Fasten the top, side, and lower flange with a minimum of 1-1/2" ring shank nail 4" on center. The nail should be 1-1/2" inches from the edge of the flange and 1-1/2" from the corners of the vent.

Nail must be ASTM F1667 compliant in accordance with Florida Building Code Section 15.

Millennium Metals manufactures off ridge vents in the following gauges of steel & aluminum (Aluminum available with detachable baffle only), which meets the requirements of the 2010 Florida Building Code (chapter 15).

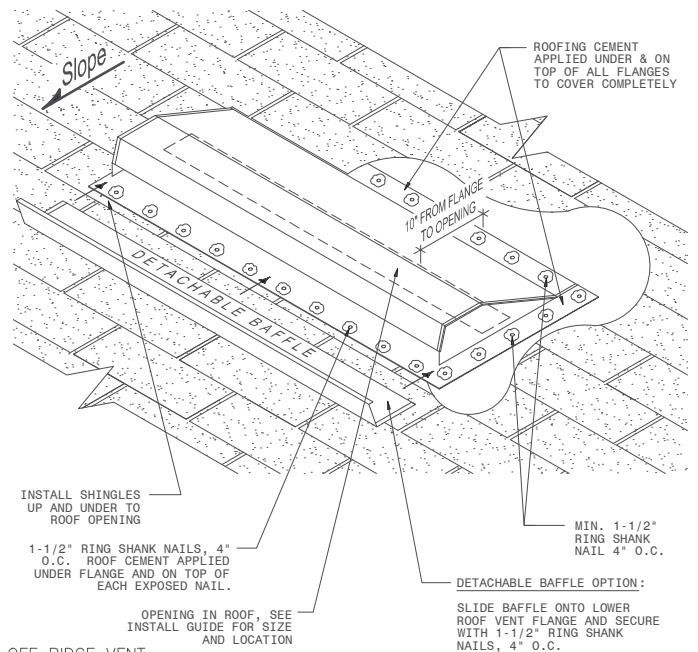
26 gauge (.0179 min) AZ50 Acrylic Coated Galvalume Steel
26 gauge (.0179 min) ASTM A-653 Steel G-90 Commercial Steel Type B
26 gauge (.0179 min) ASTM A-755 Ptd Steel Commercial Steel Type B
26 Ptd Aluminum (.025 min) ASTM B-209 *

\*Aluminum is only available with detachable baffle due to Florida Product Approval.



**MILLENNIUM  
METALS, INC.**

10200 EASTPORT ROAD JACKSONVILLE, FL 32218  
904-358-8366 WATTS 1-877-358-7663 (ROOF)  
FAX 904-358-8285



## OFF RIDGE VENT

**MILLENNIUM METALS INC.**  
TOLL FREE: 1-877-358-7663  
FAX: 904-358-8285

SUBJECT TO CHANGE WITHOUT NOTICE 11/14/13

PAGE 2

## Evaluation Report FLAMCO "Off-Ridge Vent" Roof Vent

**Manufacturer:**  
**Florida Metal Products, Inc.**

6940 Stuart Avenue  
Jacksonville, FL 32254

for

**Florida Product Approval**

**# FL 21580.1 R1**

**Florida Building Code 6th Edition (2017)**

**Method: 2 - B**

**Category: Roofing**

**Sub - Category: Roofing Accessories that are an Integral  
Part of the Roofing System**

**Product Name:** "Off-Ridge Vent"  
**Product Description:** Roof Vent  
**Attached To:** Wood Deck

### Prepared by:

James L. Buckner, P.E., SECB  
Florida Professional Engineer # 31242  
Florida Evaluation ANE ID: 1916  
Project Manager: Diana Galloway  
Report No. Report No. 17-185- ORV-ER  
(Revises 16-143-ORV-ER, FL 21580.1)  
Date: 9/18/17

Facsimile of digital copy signed by  
James L. Buckner, P.E.  
Electronically signed and sealed documents shall  
comply with the provisions of FAC Rule 61G15-23.



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### Contents:

Evaluation Report Pages 1 – 9

CBUCK, Inc. dba CBUCK Engineering

Phone: (561) 491-9927 Email: [cbuck@cbuckinc.net](mailto:cbuck@cbuckinc.net) Website: [www.cbuckinc.net](http://www.cbuckinc.net)

Business: 1374 Community Dr., Jupiter, FL 33458 • Corp/Mailing: 2637 E. Atlantic Blvd, #34069, Pompano Beach, FL 33062

### 10.0 Performance:

#### 10.1 Wind Resistance:

Table A Allowable Loads	
Design Uplift Pressure	-46 PSF

#### Notes:

1. Allowable design pressure(s) for allowable stress design (ASD) with a margin of safety of 2 to 1.

### 11.0 Performance Standard:

The following test protocols were performed to demonstrate compliance with the intent of the code:

11.1 **ASTM E330-02** – *Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors and by Uniform Static Air Pressure Difference*

### 12.0 Code Compliance:

12.1 The product assembly described herein has demonstrated compliance with the Florida Building Code 6th Edition (2017) Section 1708.2.

### 13.0 Limitations and Conditions of Use:

13.1 Design of support system is outside the scope of this report. Support shall be structural framing members complying with the code and shall be designed by others.

#### 13.2 Scope of "Limitations and Conditions of Use" for this evaluation:

This evaluation report for "State Approval" contains technical documentation, specifications and installation method(s) which include "Limitations and Conditions of Use" throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under "State Approval".

#### 13.3 Option for application outside "Limitations and Conditions of Use"

Rule 61G20-3.005(1)(e) allows engineering analysis for "project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code". Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others.

13.4 This report is a building code product evaluation per FLPE rule (FAC) 61G15-36 to comply with Florida product approval rule (FAC) 61G20-3. This evaluation report is part of the Florida Building Commission approval for the listed code related criteria. This report by James Buckner, P.E. and CBUCK Engineering is not a design certification of code compliance construction submittal documentation, per FBC section 107, for any individual structure, site specific or permit design.

13.5 Structural loads shall comply with the design provisions of the FBC 6th Edition (2017), Chapter 16, Section 1609.

13.6 All metal components and fasteners shall be corrosion resistant in accordance with FBC, including but limited to Sections 1504.3.2, 1506.6 and 1507.4.4.

13.7 Refer to applicable building code section for ventilation requirements.

13.8 Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.

13.9 This report does not evaluate the use of this product assembly as described in this report for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)

### 14.0 Quality Assurance:

The manufacturer has demonstrated compliance of products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through Keystone Certifications, Inc., (FBC Organization #QUA ID:1824).

**1.0 Manufacturer:** Florida Metal Products, Inc. dba FLAMCO

6940 Stuart Avenue  
Jacksonville, Florida 32254  
(800) 634-8400  
<http://flamco.com>

**2.0 Manufacturing Plant:** Jacksonville, Florida

### 3.0 Product:

**3.1 Product Name:** "Off-Ridge Vent"  
**3.2 Product Description:** Roof Vent

### 4.0 Evaluation Scope:

**4.1 Compliance with the following**  
Florida Building Code 6th Edition (2017)

**4.2 Evaluation Method:**  
Florida Product Approval Rule 61G20-3.005 (2) (b)

**4.3 Evaluation Classification:**  
Category: Roofing  
Sub Category: Roofing Accessories that are an Integral part of the Roofing System

**4.4 Properties Evaluated**  
Structural (Wind Resistance) Properties

**4.5 Limits of Evaluation:**  
This product assembly evaluation is limited to compliance with section 4.1 to section 4.4 of this report.

**5.0 Evaluated Uses:**  
FLAMCO "Off-Ridge Vent" is used as a roof ventilator.

### 6.0 Product Assembly Description:

**6.1 General:**  
The FLAMCO "Off-Ridge Vents" are low profile, off-ridge roof vent for pitched roofs fabricated from 26 gauge, G-90 primed, galvanized steel with a galvanized steel mesh covering mechanically attached to Plywood Deck.

**7.0 General Assembly as Evaluated:**  
Refer to section 15.0 of this report for product assembly components/materials & standards.

**8.0 Support System:**  
(Design of support system is outside the scope of this evaluation.)

**8.1 Type:** Wood Deck  
**8.2 Description:** 15/32" (min.) or greater plywood, or  
Wood plank deck (based on minimum density/specific gravity of 0.42)

**9.0 Slope:**  
Minimum slope shall be 2:12. (and in compliance with FBC Chapter 15 based on the type of roof covering, applicable code sections and in accordance with manufacturer's recommendations.)

### 15.0 System/Components

#### 15.1 "Off Ridge Vent"

**15.1.1 Material:** Steel  
**15.1.2 Thickness:** 26 gauge (min.)  
**15.1.3 Yield Strength:** 40 ksi min.  
**15.1.4 Corrosion Resistance:** In compliance with FBC Section 1507.4.3:  
ASTM A792 coated, or ASTM A653 G90 galvanized steel  
**15.1.5 Overall Product Dimensions ( $\pm \frac{1}{4}$ " nominal):**  
**15.1.5.1 Length(s):** 2', 4', 6' and 8' (max.)  
**15.1.5.2 Width:** 23-1/2" (max.)  
**15.1.5.3 Height:** 4-1/2" and 8-1/2" (max.)

#### 15.2 Fastener:

**15.2.1 Base Fastener:** Attaches Roof Vent to Deck  
**15.2.1.1 Type:** Smooth or Ring Shank Roofing Nails  
**15.2.1.2 Size:** 11 gauge x 2" (Long)  
**15.2.1.3 Corrosion Resistance:** Per FBC Section 1506.5  
**15.2.1.4 Standard:** Per ASTM F 1667

#### 15.3 Roof Adhesive:

**15.3.1 Type:** Standard Heavy bodied Flashing Cement  
**15.3.2 Description:** Asbestos-free asphalt based roof cement  
**15.3.3 Application Size:** 1/4" thick (min.)  
**15.3.4 Standard:** Per ASTM D 4586 Type I

### 16.0 Installation Method:

(Refer to installation method at the end of this evaluation report.)

Prepare deck opening by trimming any shingles or tiles & existing nails that may interfere with ridge vent installation. Apply roof cement to the underside, back and side flanges of the ridge vent. Cement should be a 1/4" thick and extend 2" onto roof underlayment. (Install cement in compliance with manufacturer's installation guidelines.) Position vent base flange beneath loosened shingles and align with deck opening. Attach the unit side flanges to deck with fasteners per Section 15.2.1 spaced 4" o.c. and 1" from each end. Apply Roofing Cement to exposed fastener heads. Minimum fastener penetration thru bottom of support, 3/16".

The FLAMCO "Off-Ridge Vent" shall be installed in compliance with the installation method listed in this report and applicable code sections of FBC 6th Edition (2017). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

### 17.0 Evaluation Reference Data:

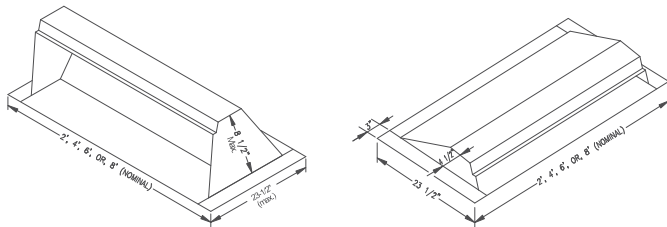
**17.1 ASTM E330-02 Uniform Static Air Pressure Difference Test**  
By Fenestration Testing Laboratory, Inc. (FTL) (FBC Organization #TST ID: 1657)  
Project #16-6647, Lab #9124, Dated: 11/09/16

**17.2 Quality Assurance**  
By Keystone Certifications, Inc. (FBC Organization #: QUA 1824)  
Licensee #440

**17.3 Engineering Analysis**  
By James L. Buckner, P.E. @ CBUCK Engineering  
(FBC Organization # ANE 1916)

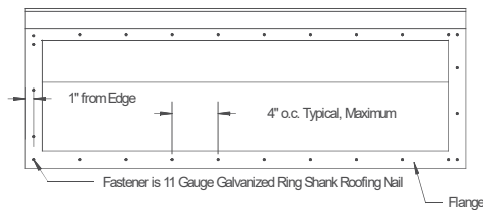
**17.4 Certification of Independence**  
By James L. Buckner, P.E. @ CBUCK Engineering  
(FBC Organization # ANE 1916)

Installation Method  
FLAMCO  
"Off-Ridge Vent" Roof Vent

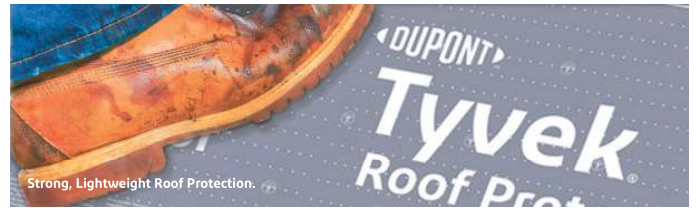


"Off-Ridge Vent"  
(for Tile Roofs)  
Isometric View

"Off-Ridge Vent"  
(for Shingle Roofs)  
Isometric View



Top Plan View  
(Typical Fastening Pattern)  
(Not to Scale)



DuPont™ Tyvek® Roof Protector™ is an engineered synthetic roofing underlayment with a high strength to weight ratio. Brought to you by DuPont, the trusted name in total building envelope solutions. DuPont™ Tyvek® Roof Protector™ is ideal for steep slope roofing applications under asphalt shingles or metal cladding.

DuPont™ Tyvek® Roof Protector™	
Roll Size (10 square)	42" X 286"
Rolls Per Pallet	49
Roll Weight	20 lbs
Warranty	20 years
UV Exposure	3 monthss
Roof Types	
Asphalt Shingle	✓
Metal Cladding	✓
Recyclable	✓
ASTM D226 Types I & II	✓
AC188	✓
Intertek CCRR-1087	✓
Class A Per ASTM E108	✓



**Designed to Lay Flat**  
Lays flat and stays flat for a more uniform shingled surface.



**Printed Guidelines for Shingle Alignment**  
2" chalk mark guide lines make installation go quickly.



**Protects the roof**  
Preserves the roof deck during installation and provides an effective secondary moisture barrier.



**High coverage in a roll**  
Large, but lightweight roll provides maximum coverage for a quick installation.

## DuPont™ Tyvek® Roof Protector™ – Product Information

### FEATURES/BENEFITS

**Description**  
DuPont™ Tyvek® Roof Protector™ – with its four-layer construction providing excellent strength, grip and water-resistance – is the ideal engineered synthetic underlayment for steep slope roofing applications under asphalt shingles or metal panel roof materials, brought to you by the trusted name in total building envelope solutions.

Tyvek® Roof Protector™ is tough and tear-resistant, laying flat and staying flat for easier installation and better coverage per roll. Its high strength to weight ratio, slip-resistant surface and lightweight durability offers peace of mind to professional builders and homeowners alike.

**Available Sizes**  
Tyvek® Roof Protector™ is available in 10 square rolls: 42" x 286"/11m x 87.2m (93.0m²)

**Ease of Use**  
Tyvek® Roof Protector™ preserves the roof deck during installation, minimizing tearing at fastener points as a result of its excellent strength and deck grip. Tyvek® Roof Protector™ comes with a number of features and benefits:

- Lightweight material lays flat, stays flat and repositions with ease
- Large roll provides maximum coverage for quick installation
- Features 2" chalk mark guide lines for easier shingle alignment
- Acts as an effective secondary moisture barrier
- Withstands up to 90 days of UV exposure and comes with a 20-year limited warranty
- Low flame spread with a class "A" fire rating per ASTM E108
- Florida Building Code approved and meets AC188 (Intertek CCRR-1062), ASTM D226 Types I & II, CAN/CSA A123.3, CAN/CSA A220.1

### PROPERTIES

DuPont™ Tyvek® Roof Protector™ exhibits physical properties as indicated in Tables 1 and 2 when tested as represented. Review all instructions and (Material) Safety Data Sheet (MSDS) before use. Please contact DuPont at 1-800-488-9835 when additional guidance is required for writing specifications that include this product.

TABLE 1: Physical Properties for Tyvek® Roof Protector™

Test Method	Property	Typical Value	Units
ASTM D1777	Nominal Thickness (mm)	0.254	mm
ASTM D1777	Nominal Thickness (mil/s)	10	mil/s
ASTM D4869	Liquid water transmission	Pass	–
ASTM E96	Permeability (MVTR)	<0.05	Perms
ASTM D751	Tensile strength (MD / CD)	MD: 102 CD: 90	lb/f
ASTM D751	Elongation (MD / CD)	MD: 17 CD: 18	%
ASTM D4533	Tear strength (MD / CD)	MD: 25 CD: 40	lb/f
ASTM E108	Fire rating	Class A	–
ICC-ES AC188	UV exposure	90	–
Thermal Cycling	Temperature range	-40–240 [-40–115]	°F (°C)
ICC-ES AC188, per Intertek CCRR-1087, ASTM D226	Code approvals	Pass	–

TABLE 2: Specifications for Tyvek® Roof Protector™

Specifications	Typical Value	Units
Length per roll	286	ft
Width per roll	42	in
Weight per roll	20	lb
Roll size	42"x286" (10 square)	square
Rolls per pallet	49	–
Pallet weight	1,095	lb
Weight per square	2.04	lb
Warranty	20	years

## DuPont™ Tyvek® Roof Protector™ – Installation

### PRECAUTIONS

#### Safety

- Apply Tyvek® Protec™ taut and wrinkle-free. Do not stretch.
- Do not apply Tyvek® Protec™ over wet or frost-covered roof sheathing.
- Caution should be taken when walking on Tyvek® Protec™ until it has been fastened according to instructions.
- Caution should be taken when walking on Tyvek® Protec™ when it is wet or frost-covered.
- Use fall protection when working on roof. Refer to OSHA safety regulations 29 CFR1926 subpart M.
- Consult your local DuPont™ Tyvek® Specialist for additional information.

#### Preparation

- Apply Tyvek® Protec™ over a dry, smooth, clean and defect-free roof deck. Tyvek® Protec™ cannot be installed over existing roof cladding.
- Tyvek® Protec™ is a vapor barrier. Ensure that the space beneath the roof sheathing is properly ventilated before installing to avoid condensation problems.

### INSTALLATION INSTRUCTIONS

1. Lay courses of Tyvek® Roof Protector™ horizontally in "shingle style" fashion following the lap lines provided in 4" course overlaps and 6" end laps beginning along the eave edge. Offset end laps in successive courses by 6 feet.
2. When attaching Tyvek® Roof Protector™ to the roof sheathing:
  - When used under asphalt shingles, and metal roof cladding, 1" diameter (min) metal or plastic (ring shank or smooth shank) cap-nails or cap-staples are required.
  - When used under asphalt or metal roof cladding, 1" diameter (min) metal or plastic cap-nails or cap staples are recommended. Un-capped staples or standard roofing nails may be used if shingles are installed within 36 hours (unless rain or high winds are expected). Use of un-capped fasteners may result in a risk of blow off or leakage around the fastener penetrations during a wind or rain event.
  - All anchoring must be performed flush to the roof and 90 degrees to the roof deck.
  - Install fasteners 12" on center (o.c) along course and end over-laps and a single row 24" on center along the middle line of the field. Use the printed pattern as a guide.
3. In high wind zones (at or above 100 mph per IRC R301.2), fasteners must be installed at all printed locations on the DuPont™ Tyvek® Roof Protector™. It must be fastened using corrosion-resistant metal or plastic cap nails with a head diameter of at least 1" and a thickness of at least 32-gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge (0.105 inches) with a length to penetrate through the roof sheathing of a minimum of ¼ inch into the roof sheathing.
4. Apply Tyvek® Roof Protector™ with two layers on roofs with slopes between 2:12 and up to 4:12. Begin with a 26" undercourse strip parallel to the eave edge, and then cover with a full width sheet. Overlap successive sheets by 26".
5. Install Tyvek® Roof Protector™ over drip edges along eave edge and under drip edges along rake edges.
6. Lap Tyvek® Roof Protector™ 8" (min) onto walls.
7. Line roof valleys with a sheet of Tyvek® Roof Protector™ prior to installing horizontal courses of Tyvek® Roof Protector™. Lap the ends of horizontal Tyvek® Roof Protector™ courses over the valley sheet by 6".
8. At ridges and hips where ridge vents will not be applied, cross-lap Tyvek® Roof Protector™ from one roof plane onto the other by 6". For additional weather protection, apply a 24" wide sheet of Tyvek® Roof Protector™ across hips and ridges.

## DuPont™ Tyvek® Roof Protector™ – Warranty Information

### 20-Year Limited Product Replacement

This is not a Consumer Warranty.

DuPont provides the following warranty to Builders, General Contractors or Professional Installers upon the terms and conditions set forth herein. Warranty is not transferable.

The DuPont™ Tyvek® Roof Protector™ product originally installed as a standard part of the building envelope on a building roof identified by ICC-ES AC188 in North America entitles you to certain quality assurance standards as provided in this DuPont™ Tyvek® Roof Protector™ Product Replacement 20-Year Limited Warranty ("warranty").

This 20-Year Limited Warranty is effective for this product purchased and installed after June 1, 2017.

#### Product Only Warranty

E.I. du Pont de Nemours and Company ("DuPont") warrants that the DuPont™ Tyvek® Roof Protector™ Product originally installed on a roof having a minimum 2:12 slope will meet the "Pass" requirements of ICC-ES AC188 for its liquid water holdout property in effect at the time of purchase of the DuPont™ Tyvek® Roof Protector™ Product for a period of twenty (20) years after the date of purchase when the problem is caused solely by the failure of DuPont™ Tyvek® Roof Protector™ Product to meet that property. If the DuPont™ Tyvek® Roof Protector™ Product is repaired or replaced, the warranty will continue from the original date of purchase and not from the date of repair or replacement.

This warranty DOES NOT COVER any damages arising from:

1. The negligence, gross negligence, or willful misconduct of any builder, general contractor, professional installer or any third party;
2. Acts of God, including but not limited to, fire and lightning, hurricane, high winds;
3. Vandalism or attack by any party;
4. Defects in the structure or a component of the structure (e.g., window, skylight, chimney, vents, etc.) or selection of any components of the structure, or premature deterioration of the building materials, or nonstandard use or application of the DuPont™ Tyvek® Roof Protector™ Product;
5. Foreign objects or agents, including incompatibility of materials;
6. UV exposure of the DuPont™ Tyvek® Roof Protector™ Product in excess of that set forth in the applicable Physical Properties Data Sheet;
7. The warranty is void if the Product is used as a permanent primary water barrier.
8. Improper installation of the DuPont™ Tyvek® Roof Protector™ Product, improper building practices or design not in accordance with the applicable building code or industry standards, or any deviation from approved construction plans or project specifications. The DuPont™ Tyvek® Roof Protector™ Product must be installed in accordance with the applicable DuPont Installation Guidelines that are in effect at the time of the installation of the DuPont™ Tyvek® Roof Protector™ Product. Installation Guidelines are available by calling 1-800-448-9835 and online at [roofprotector.dupont.com](http://roofprotector.dupont.com).

#### What DuPont Will Do and What You Must Do

DuPont will provide to the Builder, General Contractor or Professional Installer only that quantity of replacement product required to replace any defective product that fails to meet the "Pass" requirements of ICC-ES AC188. You will be responsible for any other costs associated with or arising out of the repair or replacement. You must reasonably cooperate with DuPont or its representatives in their efforts to perform their obligations under these warranties, such as providing access in order to view installed product or to obtain samples for testing.

#### How You Can Get Warranty Service

To obtain service under this warranty, you must promptly contact DuPont at [roofprotector.dupont.com](http://roofprotector.dupont.com) or call 1-800-448-9835 regarding any potential claim, but no later than sixty (60) days after you discover any potential claim and you MUST provide DuPont with proof of purchase of the DuPont™ Tyvek® Roof Protector™ Product. You must provide DuPont with a reasonable opportunity to inspect the home or building within sixty (60) days after DuPont receives notice of your potential claim.

You must also provide access to DuPont for recovery of samples of the used product from the actual installation in sufficient quantities in order to perform testing to determine whether or not the DuPont™ Tyvek® Roof Protector™ Product failed as set forth herein. If obtaining the required samples proves not to be feasible, then, in the alternative, DuPont may use retainer samples of product manufactured from the same lot as those used in the actual installation.

#### Exclusion of Damages

DUPONT'S SOLE LIABILITY UNDER THIS WARRANTY IS LIMITED TO REPLACEMENT OF THE ROOF PROTECTOR™ PRODUCT COVERED BY THIS DUPONT WARRANTY ONLY WHEN CAUSED SOLELY BY THE FAILURE OF THE DUPONT™ ROOF PROTECTOR™ PRODUCT TO MEET THE APPLICABLE LIQUID WATER HOLDOUT PROPERTY AS REFERENCED ABOVE AND THE CONDITIONS SET FORTH ABOVE. EXCEPT AS SPECIFICALLY PROVIDED HEREIN, DUPONT SHALL NOT BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR FROM ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOST PROFITS, LOST REVENUE, LOSS OF USE OR ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY.

The foregoing is the only warranty made by DuPont for the Roof Protector™ Product. No representative, dealer or any other person is authorized to make or makes any warranty, representation or promise on behalf of DuPont with respect to such product. No terms or conditions other than those stated herein or provided by law, and no agreement or understanding, oral or written, in any way purporting to modify this warranty shall be binding upon DuPont unless made in writing and signed by an authorized employee of DuPont.

#### This Warranty is Not a Performance Claim.

\*This warranty is effective June 1, 2017.

## ROOFING APPLICATIONS

### DECK REQUIREMENTS

- Minimum 6" width, 25/32" minimum thickness wood sheathing
- Minimum 1/4" plywood sheathing or 7/16" OSB
- Sheathing spaced minimum 1/4" and maximum 1/4"
- Check local building codes

### \*Sumping or Deck Deflection (Sag)



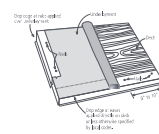
### METAL DRIP EDGE

2012 International Residential Code (IRC) requires drip edge at the eaves and rake edge of the roof. The IRC has required drip edge since the 2009 edition.

- Apply directly to deck along eave unless otherwise specified by local codes
- Apply over underlayment along rake
- With drip edge—shingles could be flush to edge or overhang 1/4" to 1/2"
- Drip edge is a requirement for Platinum and Preferred Contractor warranties

Drip Edges provide efficient water shedding at the rakes and eaves and protect the underlying wood from rotting. Drip edges should be made of a corrosion-resistant material that extends approximately 2" back from the roof edges and bends downward over the decking. Apply the drip edge underneath the underlayment along the eaves and over the underlayment on the rakes. Figure 1a details the placement and fastening of drip edges in combination with underlayment. The use of a drip edge may be required by local building codes.

Figure 1 Application of Drip Edge at Rake and Eaves



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#### On Rake Edge:

1. All regular underlayments go under the drip edge.
2. When a style D drip edge is used shingles can be flush with the drip edge or overhang by 1/4" to 1/2".
3. When a starter shingle is used on the rake edge it should also overhang the drip edge 1/4" to 1/2".

#### On Eaves:

1. All underlayment goes on top of drip edge unless otherwise specified by local codes.
2. Shingles should overhang the drip edge 1/4" to 1/2".
3. Shingles can be flush with the drip edge if D style.

Figure 2 Recommended Drip Edge

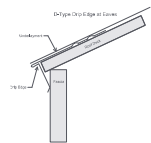
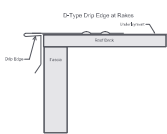


Figure 3 Acceptable Drip Edge



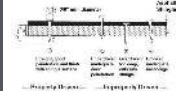
### FASTENER REQUIREMENTS

- Use galvanized steel, stainless steel, or aluminum nails with minimum 12 gauge shank and 3/4" diameter head
- Fasteners should comply with ASTM F1667
- Check local building codes
- Fasteners must penetrate 1/4" into wood decking
- Decks less than 1/2" thick—fasteners must penetrate completely through minimum 1/4"



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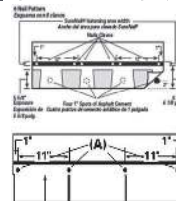
Figure 4 Fastening



#### Quantity of Fasteners:

- The number of fasteners as shown in printed installation instructions
- Six fasteners required for mansard-hand sealing is also required
- Check local building codes

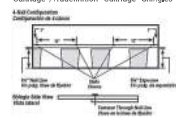
Figure 5 Mansard Roof Hand Sealing Example



#### 5" Exposure

Figure 6

#### Oakridge®/Trudefection® Oakridge® Shingles

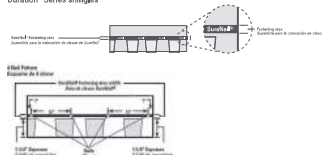


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Figure 7

Duration® Series shingles



## Shingle Exposure

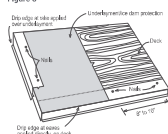
- Imperial 3 Tab = 5" exposure
- Metric 3 Tab = 5 1/4" exposure
- Laminates = 5 1/4" exposure
- Acceptable tolerance: Plus or minus 1/8"

## UNDERLAYMENT APPLICATION: SLOPES 4:12

Some building codes have specific requirements for underlayment and ice dam protection. The requirements of these codes must be followed.

Use an Owens Corning® Synthetic Underlayment or equivalent underlayment meeting ASTM D226, D4899 or D4767. An approved self-adhered ice and water barrier meeting ASTM D1979 is also acceptable. Follow underlayment manufacturer's application instructions. Depending on the shingle manufacturer's specific warranty requirements, asphalt-saturated felt meeting ASTM D226 may be acceptable.

Figure 8



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## EAVES PROTECTION MEMBRANE

## INSTALLATION REQUIREMENTS

## MINIMUM APPLICATION TEMPERATURE

- LASTOBOND SANDED FINISH: 45 °C
- LB1236: 45 °C

## COMPATIBLE SUBSTRATES

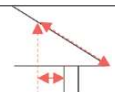
The substrate must be clean and free of dust, grease and any other contaminant. No nail or screw must protrude.

- POLYWOOD
- OSB
- ASPHALTIC BOARDS (RESISTORBOARD)

## TOOLS REQUIRED

- KNIFE
- TAPE MEASURE
- HEAVY ROLLER

Hints and tips:  
To calculate the required eaves protector width, add 30 cm to the projecting portion of the roof and bring back that point vertically on the sloping portion. The membrane must cover from that point to the bottom of the roof.



## EAVES PROTECTION MEMBRANE

## PRODUCT REQUIRED FOR THIS STEP:

- LASTOBOND SANDED FINISH OR LB1236

## INSTALLATION OF EAVES PROTECTION MEMBRANE

1. Install a drip edge at the bottom of the roof slope.
2. Position the membrane parallel to the horizontal edge of the bottom of the roof, while leaving approximately 15 mm extra at the front where the gutter will later be installed. If the gutter is already installed, simply align the membrane to the roof edge.
3. Peel back the first half of a silicone protective film by 10 cm and press the membrane in place.
4. Continue removing the silicone film.
5. Firmly press the membrane with a heavy rubber roller to increase adhesion.
6. Peel back the silicone film of the second half and press the entire surface of the membrane with a heavy roller.
7. If the drip edge was not installed before the membrane, install it on top, at the bottom of the roof.
8. A synthetic RESISTOR membrane can then be installed horizontally on the entire surface starting from the lowest part of the roof. See the installation method on the RESISTOR's product page.

## OVERLAPS

- Lateral: 75 mm
- Transversal: 75 mm



TopShield Starter + Shingles are designed with a strong adhesion to lock shingles in place to prevent blow-off along the eave of the roof. Starter Shingles eliminate the need to cut off tabs or headlap.

## USES:

For application to the eaves prior to shingle application. Allows for proper alignment of the courses of shingles.

## CONVENIENT

One (1) bundle provides 105 lineal feet of actual coverage.

## ADVANTAGES:

- Reduces waste.
- Clean Look at the edge and eave.
- Fast and easy to install.
- Creates a seal for the first course of shingles.
- Eliminates the need for plastic cement.



## Product Specifications

Size	15 1/2" x 39 1/4" (394 mm x 1000 mm)
Piece Size	7 1/2" x 39 1/4" (197 mm x 1000 mm)
Shingles per Bundle	16
Pieces per Bundle	32 (7 1/2" x 39 1/4" [197 mm x 1000 mm])
Lineal Feet per Bundle	Approximately 105 (32.0 m)

## Applicable Standards and Codes

ASTM D3462
ASTM D3161 (Class F Wind Resistance)
ASTM E108/UL 790 (Class A Fire Resistance)*
Florida Product Approval (FL 10674)
Miami-Dade County Product Approval (Pending)*
UL E2453-D1

SRS Distribution Inc.  
TopShield Materials

7440 S. Hwy 121  
McKinney, TX 75070

469.421.0616

www.srstopshield.com



## TopShield Starter Shingle + Installation Instructions

The TopShield Starter Shingle + is designed for use with most asphalt shingles. When using this starter shingle it is recommended that you check for any exclusion by the manufacturer of shingle being used.

TopShield Starter Shingle + is designed to be broken into two pieces, each piece has its own sealant strip. When separated each starter shingle is 7 1/2" x 39 1/4", each bundle will cover approximately 105 lineal feet. See Fig. 1.

This starter can be used with shingles that have an exposure of no more than 6 inches, if the exposure is greater than 6 inches a full starter (15 1/2" x 39 1/4") would be required. See Fig. 1.

1. Start first starter shingle with 6" removed from the rake edge and flush with the drip edge, starter shingle can extend no greater than 1/4" beyond the edge of the eaves. Use 5 fasteners placed 2" to 3" from the edge of the eaves. See Fig. 2.
2. During application the installer must ensure that when the starter is applied that the over laying shingles and joints do not line up with the starter end joints. End joints must be a minimum of 4" from the over laying shingle.
3. When the starter is used with 3-tab shingle the installer must ensure that nails in the starter are not exposed between the cutouts of the over laying shingle.

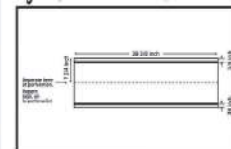
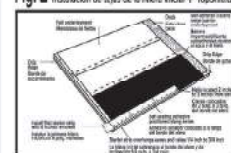
## Tejas para la hilera inicial TopShield Instrucciones de instalación

La hilera inicial de tejas + TopShield se puede utilizar con la mayoría de las tejas de asfalto. Al utilizar esta hilera inicial, recomendamos comprobar si existe alguna incompatibilidad con las tejas del fabricante que esté utilizando.

La hilera inicial de tejas + TopShield está diseñada para dividirse en dos partes. Cada parte cuenta con su propia tira de sellado. Al separarse, cada hilera inicial tiene un tamaño de 7 1/2" x 39 1/4". Cada paquete cubre aproximadamente 105 pies lineales. Ver la Fig. 1.

Esta hilera inicial puede utilizarse con tejas + que quedan expuestas 6 pulgadas como máximo. Si la zona que queda expuesta supera las 6 pulgadas, se necesitará utilizar una hilera inicial más grande (15 1/2" x 39 1/4") Ver la Fig. 1.

1. Coloque la hilera inicial de tejas + y hágala alinear con el goterón. La teja de la hilera inicial no puede sobrepasar el borde del alero más de 1/4". Utilice 5 sujetadores colocados de 2" a 3" del borde del alero. Ver la Fig. 2.
2. Durante la colocación, el instalador debe asegurarse de que, al colocar la hilera de inicio, las juntas de los extremos de las tejas superpuestas no estén alineadas con las juntas de las tejas de inicio. Las juntas deben estar a una distancia mínima de 4" de las tejas superpuestas.
3. Cuando se utiliza una hilera de inicio para tejas de tres lengüetas, el instalador debe asegurarse de que los clavos de la hilera de inicio no queden expuestos entre las ranuras de las tejas superpuestas.

Fig. 1 TopShield Starter Shingle +  
Teja de la hilera inicial + TopShieldFig. 2 TopShield Starter Shingle + Application  
Instalación de tejas de la hilera inicial + TopShield

## CAUTION

**ROOF SURFACE MAY BE SLIPPERY:**  
Especially when wet or icy. Use a fall protection system when installing. Wear rubber-soled shoes. Walk with care.

**FALLING HAZARD:**  
Secure area below work and materials on roof. Wear a hard hat.

## NOTICE

It is important that attic space be properly ventilated to maintain product performance and to prevent damage from moisture condensation and excessively high attic temperatures. In this regard, FHA and National Building Code Minimum Property Standards must be met.

\* Starter Shingles are tested as part of a roof assembly that includes underlayment, wood decking, nailing and asphalt roof shingles.  
† Applies for all areas that recognize Miami-Dade Product Control Section.