

# **PRI Evaluation Report**

# PRI ER 1378E03

Issue Date: 04/21/2020 Last Revision: Original Issue This Report is Reviewed Annually Visit: <u>pri-group.com</u> for current status.

# **Report Holder:**

**Owens Corning Roofing and Asphalt LLC** 

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# SCOPE

## Subject: Attic Vents

VentSure<sup>®</sup> 4-foot Strip Heat & Moisture Ridge Vents, VentSure<sup>®</sup> 4-foot Strip Heat & Moisture Ridge Vents with Weather PROtector<sup>®</sup>, VentSure<sup>®</sup> RidgeCat<sup>™</sup> Rolled Ridge Vent, VentSure<sup>®</sup> Sky Runner LTE<sup>™</sup> Roll Vent, and VentSure<sup>®</sup> InFlow<sup>®</sup> Intake Vent

## CSI MasterFormat<sup>®</sup>:

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION Sub-level 2: 07 70 00 – Roof and Wall Specialties and Accessories Sub-level 3: 07 72 00 – Roof Accessories

Sub-level 4: 07 72 26 – Ridge Vents

#### **Code References:**

- 2018, 2015, 2012, 2009, and 2006 International Building Code<sup>®</sup> (IBC)
- 2018, 2015, 2012, 2009, and 2006 International Residential Code<sup>®</sup> (IRC)

#### **Properties Evaluated:**

- Criteria for Attic Vents (ICC-ES AC 132)
  - Net Free Ventilation Area
  - Burning Rate or Extent
  - Ignition Temperature
  - Dust Exposure Test
  - Temperature Cycling
  - Weathering Tests
  - Wind and Wind-Driven Rain
- External Fire Exposure (ASTM E108)

# **PRODUCT DESCRIPTIONS and APPLICATIONS**

#### Products:

VentSure<sup>®</sup> 4-foot Strip Heat & Moisture Ridge Vents VentSure<sup>®</sup> 4-foot Strip Heat & Moisture Ridge Vents with Weather PROtector<sup>®</sup>

VentSure<sup>®</sup> RidgeCat<sup>™</sup> Rolled Ridge Vent

VentSure<sup>®</sup> Sky Runner LTE<sup>™</sup> Roll Vent

VentSure<sup>®</sup> InFlow<sup>®</sup> Intake Vent

## Evidence Submitted:

- Recognized test report(s) indicating compliance with ICC-ES AC132
- Recognized test report(s) indicating compliance with ASTM E108
- Quality Documentation
- Manufacturer's Drawings and Installation Instructions

#### Manufacturing Locations:

Factory ID	Location
Niles, OH	195 E. Park Avenue
	Niles, OH 44446
Euclid, OH	23750 St. Clair Avenue
	Euclid, OH 44117
Orrick, MO	418 N. Front St.
	Orrick, MO 64077

# Product Descriptions:

OWENS CORNING<sup>™</sup> ridge and intake vents covered under this report are intended to provide natural ventilation of enclosed attic and rafter spaces as specified in the following code:

- 2018 IBC Section 1202.2.1
- 2015, 2012, 2009, and 2006 IBC Section 1203.2
- 2018, 2015, 2012, 2009, and 2006 IRC Section R806

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VentSure® 4-foot Strip Heat & Moisture Ridge Vents and VentSure® 4-foot Strip Heat & Moisture Ridge Vents with Weather PROtector®: VentSure® 4-foot Strip Heat & Moisture Ridge Vents are panels with vanes and ventilation grills that form an air flow pathway for attic ventilation, and bend to fit over the contour of the ridges of roofs. The ridge vents are available with an optional Weather PROtector® filter bonded to the vanes on the underside of the vent to help prevent the entry of weather, insects, or debris. The panels interlock to form a continuous vent along the ridge of the roof. This ridge vent is made of injection molded polypropylene classified as CC1 plastic under Section 2606.4 of the 2018, 2015, 2012, 2009 and 2006 IBC and the Weather PROtector® filter is a nominally 5 mil thick, spun bond polyester fabric. The net free ventilation area (NFVA) is 22.4 square inches per foot of vent length and 20.4 square inches per foot of vent length with Weather PROtector<sup>®</sup>.

Product:	Factory IDs:	Dimensions:
VentSure® 4-foot Strip Heat & Moisture Ridge Vents	Orrick, MO	Width: nominally 8", 10", or 12" [actual widths: min. 11.25", 13.25", or 14.75" respectively] Length: 4 feet
VentSure <sup>®</sup> 4-foot Strip Heat & Moisture Ridge Vents with Weather PROtector <sup>®</sup>	Niles, OH	Width: nominally 8", 10", or 12" [actual widths: min. 11.25", 13.25", or 14.75" respectively] Length: 4 feet

**VentSure® RidgeCat™ Rolled Ridge Vent:** VentSure® RidgeCat<sup>™</sup> Rolled Ridge Vent is a rollable, entangled mesh vent that bends to fit over the contour of the ridges of roofs. The vents include a filter fabric on the top, sides, and bottom to help prevent the entry of weather, insects, and debris. This ridge vent is made of extruded nylon classified as CC1 plastic under Section 2606.4 of the 2018, 2015, 2012, 2009, and 2006 IBC and the filter is a 90gsm spun bond polyester fabric. The net free ventilation area (NFVA) is 15.4 square inches per foot.

Product:	Factory IDs:	Dimensions:
VentSure® RidgeCat™ Rolled Ridge Vent	Euclid, OH	Width: nominally 7", 9", or 11" Length: 20 ft roll.

<u>VentSure<sup>®</sup> Sky Runner LTE<sup>™</sup> Roll Vent:</u> VentSure<sup>®</sup> Sky Runner LTE<sup>™</sup> Roll Vent is a semi-rigid, rollable vent with vanes and ventilation grills that form an air flow pathway for attic ventilation. The vents feature an external baffle to direct



wind-driven rain away from the openings. This ridge vent is made of an injection molded polypropylene-TPO polymer classified as CC2 plastic under Section 2606.4 of the 2018, 2015, 2012, 2009 and 2006 IBC. The net free ventilation area (NFVA) is 12.1 square inches per foot.

Product:	Factory IDs:	Dimensions:
VentSure® Sky Runner LTE™ Roll Vent	Niles, OH	Width: 14.5" Height: 5/8" Length: 30 ft

**VentSure® InFlow® Intake Vent:** VentSure® InFlow® Intake Vent is a semi-rigid panel with vanes and ventilation grills that can be installed at the eave or on the lower surface of the roof deck. The vent has a Weather PROtector® filter bonded to the underside. This ridge vent is made of injection molded polypropylene classified as CC1 plastic under Section 2606.4 of the 2018, 2015, 2012, 2009 and 2006 IBC and the Weather PROtector® filter is a nominally 5 mil thick, spun bond polyester fabric. The net free ventilation area (NFVA) is 10.1 square inches per foot of vent length when installed either at the eave or on the lower surface of the roof deck.

Product:	Factory IDs:	Dimensions:
VentSure <sup>®</sup> InFlow <sup>®</sup> Intake Vent	Niles, OH	Width: 14.75" Height: 7/8" Length: 48"

# Fire Classification:

OWENS CORNING<sup>™</sup> ridge and intake vents covered under this report have been evaluated for fire classification in accordance with ASTM E108. Vents covered under this report are part of Class C roof assemblies when used with approved, classified asphalt shingles. When used in classified roof assemblies, the following limitations shall be met:

- The maximum area of a continuous vent is 300 square feet and the aggregate area of the vents and any light transmitting roof panels do not exceed 30% of the floor area served.
- The vents must not be installed within 6 feet of any exterior wall required by Section 705.8 of the 2018, 2015, 2012 and 2009 IBC (Section 704.8 of the 2006 IBC) to have protected wall openings.
- If the building is NOT equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the 2018, 2015, 2012, 2009 and 2006 IBC, vents must not be installed on roofs that are required to have a fire resistance rating and individual attic vents must be separated from each other and

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any light transmitting roof panels by a distance of not less than 4 feet in a horizontal plane.

If one or more of these limitations are not met, OWENS CORNING<sup>™</sup> ridge and intake vents covered under this report are limited to installation where non-classified roof coverings are permitted.

#### Wind Resistance:

OWENS CORNING<sup>™</sup> ridge and intake vents covered under this report have been evaluated for wind and wind-driven resistance in accordance with ICC-ES AC132.

- Under 2018 IBC, vents may be installed on buildings in areas with a maximum basic design wind speed of 130 miles per hour on structures with a maximum mean roof height of 40 feet in Exposure B, C, and D areas.
- Under 2015, 2012 IBC and 2018, 2015 IRC, vents may be installed on buildings in areas with a maximum

#### **INSTALLATION – GENERAL**

OWENS CORNING<sup>™</sup> ridge and intake vents must be installed in accordance with the applicable code, this report, and the manufacturer's published installation instructions, which must be available at all times on the jobsite during installation. Ventilation must be installed with sufficient intake and exhaust vents in the determined ventilation area as required by the following code:

- 2018 IBC Section 1202.2.1
- 2015, 2012, 2009 and 2006 IBC Section 1203.2
- 2018, 2015, 2012, 2009 and 2006 IRC Section R806

The product venting area shall be marked on the product packaging.

The use of OWENS CORNING<sup>™</sup> ridge and intake vents are not permitted in Group H, I-2, and I-3 occupancies.

#### Deck:

The roof deck or roof sheathing must be code-complying, minimum  $\frac{3}{16}$  inch thick (9.5mm), exterior plywood complying with DOC PS-1; OSB rated sheathing complying with DOC PS-2; or solid sheathing using minimum nominal 1 by 6 lumber.

ultimate design wind speed of 130 miles per hour on structures with a maximum mean roof height of 40 feet in Exposure B, C, and D areas.

 Under 2009, 2006 IBC and 2012, 2009, 2006 IRC, vents may be installed on buildings in areas with a maximum basic wind speed of 100 miles per hour on structures with a maximum mean roof height of 40 feet in Exposure B, C, and D areas.

# Physical Properties:

OWENS CORNING<sup>™</sup> ridge and intake vents covered under this report have been evaluated for physical properties and other considerations in accordance with ICC-ES AC132 and qualify for use under the following code:

• 2018, 2015, 2012, 2009, 2006 IBC Section 2606.4, except that smoke-developed requirements waived per ICC-ES AC132.

Where roof diaphragm continuity is affected by the installation of ridge or intake vents, roof diaphragm nailing requirements must be addressed in accordance with applicable code and the vent installation must be approved by the code official.

#### Self-Adhering Underlayment:

Self-adhering polymer modified bitumen underlayment must comply with ASTM D1970.

#### Fasteners:

Fasteners must comply with ASTM F1667 and be minimum No. 12 gage (0.105 inch),  $\frac{3}{4}$  inch diameter head, galvanized, stainless steel, aluminum or copper corrosion-resistance nails. Fasteners must penetrate into the deck minimum  $\frac{3}{4}$  inch, or through the deck, where the deck is less than  $\frac{3}{4}$  inch thick.

#### Asphalt Cement:

Asphalt cement must comply with ASTM D4586.

#### Asphalt Shingles:

Asphalt shingles must comply with ASTM D3462.

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#### **INSTALLATION – RIDGE VENTS**

#### Ridge (Exhaust) Vents:

VentSure® 4-foot Strip Heat & Moisture Ridge Vents and VentSure® 4-foot Strip Heat & Moisture Ridge Vents may be installed on roofs with a minimum slope of 3:12 (25 percent slope) and a maximum slope of 16:12 (133 percent slope). Vents are applied over cut openings measuring 2 inches wide (for roofs with ridge boards: 1 inch on each side of the ridge board) (for roofs without ridge boards: 2 inches centered at the ridge). Cut openings shall terminate approximately 6 inches from gable end wall. The vents must be centered over openings and attached to the roof sheathing using 2-½ inch long, corrosion resistant ring shank nails supplied with the vent, with one nail installed in each premolded hole (2 per linear foot of vent). Vents shall be sealed to underlying field asphalt shingles at lower edges using asphalt cement. Successive vent panels must be snapped together to form a continuous vent product. Fasten hip and ridge asphalt shingles over the vent and into to the deck on the marked "shingle nail line" using nails supplied with the vent or alternatively, using fasteners approved by this report.

VentSure® RidgeCat™ Rolled Ridge Vent: The VentSure® RidgeCat™ Rolled Ridge Vent may be installed on roofs with a minimum slope of 2:12 (17 percent slope) and a maximum slope of 18:12 (150 percent slope). Vents are applied over cut openings measuring 2 inches wide (for roofs with ridge boards: 1 inch on each side of the ridge board) (for roofs without ridge boards: 2 inches centered at the ridge). Cut openings shall terminate approximately 6 inches from gable end wall. A continuous bead of asphalt cement shall be applied approximately 3 inches below the cut opening along each side of the ridge and at each end to seal vent to underlying field asphalt shingles. Prior to installing vent, a minimum 6 inch wide hip and ridge asphalt shingle should be nailed over the ridge at each rake edge. Vent must be centered over opening and attached to the roof sheathing using fasteners approved by this report. Vent is secured in place along both sides with nails placed 1-½ inch from each end and spaced a maximum 48 inches o.c. in between. Where two pieces of vent butt together, a minimum 6 inch wide hip and ridge asphalt shingle should be centered beneath the butt joint, span across the cut opening, and nailed in place. Fasten hip and ridge asphalt shingle should be centered beneath the butt joint, span across the cut opening, and nailed in place. Fasten hip and ridge asphalt shingles over the vent and into to the deck within the printed "tack line" using fasteners approved by this report.

VentSure<sup>®</sup> Sky Runner LTE<sup>TM</sup> Roll Vent: The VentSure<sup>®</sup> Sky Runner LTETM Roll Vent may be installed on roofs with a minimum slope of 2:12 (17 percent slope) and a maximum slope of 16:12 (133 percent slope). Vents are applied over cut openings measuring 1-¼ inches wide (for roofs with ridge boards: ¾ inch on each side of the ridge board) (for roofs without ridge boards: 1-¼ inches centered at the ridge). Cut openings shall terminate approximately 6 inches from gable end wall. The vents must be centered over openings and attached to the roof sheathing using nails supplied with the vent, with one nail installed in each molded dimpled depression (4 per linear foot of vent). Successive vent pieces may be snapped together to form a continuous vent product. Fasten hip and ridge asphalt shingles over the vent and into to the deck on the marked "shingle nail line" using nails supplied with the vent or alternatively, using fasteners approved by this report.

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#### Intake Vents:

**VentSure**<sup>®</sup> **InFlow**<sup>®</sup> **Intake Vent:** The VentSure<sup>®</sup> InFlow<sup>®</sup> Intake Vent may be installed on roofs with a minimum slope of 4:12 (33 percent slope) and a maximum slope of 16:12 (133 percent slope). Vents are applied over cut openings measuring 1-½ inches wide and may be installed in an eave application or mid-roof application. All cut openings shall terminate approximately 6 inches from gable end walls, chimneys, vertical walls, or other obstructions and 24 inches from roof valleys.

- For eave application, cut opening shall be 6-½ inches above the lower edge of the drip edge or eave edge. Apply a minimum 18 inch wide piece of granule surfaced self-adhering underlayment and excise to reveal the cut opening. The vents must be positioned so that the alignment notch is even with the eave edge thereby allowing air intake through the bottom openings of the vent. Attach vents to the roof sheathing using 2-½ inch long, corrosion resistant ring shank nails supplied with the vent, with one nail installed in each pre-molded hole (2 per linear foot of vent). Successive vent panels may be butted together to form a continuous vent product. Apply self-adhering underlayment over vent surface and covering the top intake openings. For eave application, air intake is through the bottom openings of the vent. Install field asphalt shingles over vent, including rake edge metal and asphalt shingle starter, in accordance with shingle manufacturer's instructions except using hand nail technique and 2-½ inch long, corrosion resistant ring shank nails supplied with the vent.
- For mid-roof application, cut opening should be a minimum 6-½ inches from the conditioned space's exterior wall and 5 inches above the lower edge of an asphalt shingle course. The vents must be positioned so that the alignment notch is even with the lower edge of the asphalt shingle course identified. Attach vents to the roof sheathing using 2-½ inch long, corrosion resistant ring shank nails supplied with the vent, with one nail installed in each pre-molded hole (2 per linear foot of vent). Successive vent panels may be butted together to form a continuous vent product. Apply self-adhering underlayment over vent surface, but do not cover the top intake openings. For mid-roof application, air intake is through the top openings of the vent. Install field asphalt shingles over vent, including rake edge metal and asphalt shingle starter, in accordance with shingle manufacturer's instructions except using hand nail technique and 2-½ inch long, corrosion resistant ring shank nails supplied with the vent.

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#### **CONDITIONS OF USE & IDENTIFICATION**

The OWENS CORNING<sup>™</sup> Ridge Vents described in this report comply with, or are suitable alternatives to, the codes listed in this report, subject to the following conditions:

- The products as well as the installation methods must be in compliance with the applicable code, this report, and the installation instruction provided by the manufacturer. If the manufacturer's installation instructions differ from what is listed in this report, this report governs.
- This report does not supersede the local jurisdiction regulations and the final approval of the building products, materials, or systems in this report is the responsibility of the authorities having jurisdiction.
- This report is only valid if the product(s) and/or the referenced documentation/codes related to the products do not change. If there is a change in product(s) and/or the referenced documentation/codes related to the products, PRI Construction Materials Technologies, LLC must be informed and further action may be necessary to revalidate this report.
- This report, in its entirety, must be available at job sites upon request by the user or for inspection by the Building Official. A copy of this report in full shall be provided by the manufacturer or its distributors.

- The products are identified by marks bearing the report holder's name, the manufacture location, the product name, and the Seal of PRI Validation Program for Building Materials. The Seal shall indicate, at a minimum, the following:
  - a. ICC-ES Acceptance Criteria, AC132
  - b. ASTM E108 Class C
- The products are manufactured at the locations listed in this report and are manufactured under a quality control program with inspections and/or surveillance by PRI Construction Materials Technologies, LLC.
- This report is a supplement to product certification. The products listed herein must be certified separately under the PRI Validation Program for Building Products. This report alone is not a product certification and requires separate product certification under the PRI Validation Program for Building Products to be valid.
- The current status of this report as well as a directory of certified products, including supplemental PRI Evaluation Reports, can be found at <u>pri-group.com</u>.

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