

SECTION 07728

BREATHER ROOF VENT

******* Active Ventilation Products, Inc. manufacturers passive and powered exhaust ventilators, tube skylights, combination skylight and ventilator units, and breather roof vents.**

This guide can be used to prepare a specification for Aura Breather Vent, an aluminum, roof mounted, passive exhaust ventilator which draws water vapor from built-up and other roof systems. This unique roof vent is wind driven and operates with no moving parts.

Aura Breather Vents can be specified as a separate specification section by editing this guide. The vents can also be included in a more comprehensive section specifying the total roof system such as Section 07510 - Built-Up Bituminous Roofing. For that application paragraphs from this guide would be inserted into the section specifying the roof system.

The specification section is organized by placing information in three standard parts:

- PART 1 - GENERAL** **Describes administrative and procedural requirements.**
- PART 2 - PRODUCTS** **Describes materials, products, and accessories to be incorporated into the construction project.**
- PART 3 - EXECUTION** **Describes how the products will be installed at the construction site.**

Throughout this product guide specification, references are made to other specification sections that might be contained in the project manual. These references are presented as examples and coordination reminders. For each project, these references will need to be revised to reflect actual sections being used.

Within the specification text, Imperial dimensions are presented first in brackets followed by System International Metric (SI) equivalents also in brackets. Depending on project requirements, either the Imperial or the SI metric equivalents will need to be deleted.

The specifier will need to edit this product specification for a specific project to reflect the options and applications being used. The guide section has been written so that most editing can be accomplished by deleting unnecessary requirements and options. Options are indicated by []. Notes to assist the specifier in selecting options and editing the specification guide are printed in bold and indicated with ***. For final editing, all brackets and notes will need to be deleted from the guide.**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes: Passive, wind driven, breather vent with no moving parts installed in roof system to dissipate water vapor from beneath roof membrane.

***** **Aura Breather Vents** are typically installed in built-up bituminous roof systems. They can also be used for single ply, liquid applied, asphalt shingle, metal, and other roof systems. Select appropriate paragraph from the following to reflect project conditions.

- B. Section 07310 - Shingles: Asphalt shingle roofing to receive breather vents.
- C. Section 07410 - Metal Roof Panels: Metal roof system to receive breather vents.
- D. Section 07500 - Membrane Roofing: [Built-up] [Single ply] membrane to receive breather vents.

1.2 SUBMITTALS

- A. Provide in accordance with Section 01330 - Submittal Procedures:
1. Product data for breather vents.
 2. Manufacturer's installation instructions and details.

PART 2 - PRODUCTS**2.1 ACCEPTABLE MANUFACTURERS**

- A. Active Ventilation Products, Inc.

1. Address:

P.O. Box 1521
Newburgh, New York 12551-1521

2. Telephone: 800-247-3463 or 845-565-7770
3. FAX: 845-562-8963
4. Website: www.roofvents.com
5. E-mail: roofvents@aol.com

- B. Requests to use equivalent products of other manufacturers shall be submitted in accordance with Section 01630 - Product Substitution Procedures.

2.2 BREATHER ROOF VENTS

***** **Aura Breather Vent is designed to allow moisture from structural concrete roof decks, lightweight concrete toppings, insulating concrete, and other sources within building from being trapped beneath built-up roof and other membranes. Aura Breather Vent also helps equalize exterior and interior air pressure and prevent blisters in roof membrane.**

- A. Type: Passive, wind driven vent installed in roof system to allow water vapor from [structural concrete deck] [lightweight concrete topping] [insulating concrete roof deck] and other sources within building to vent to exterior and to equalize exterior and interior air pressure while preventing entry of wind-blown rain and snow; Aura Breather Vent as manufactured by Active Ventilation Products, Inc.
- B. Material: Aluminum produced with 50 percent minimum recycled material.
- C. Construction: Flanged tube with removable, weather proof, circular head cap that securely fits onto vent top. Base flange pre-drilled for fasteners.
- D. Head cap: Two concentric cylinders of slotted vertical vanes. Inside cylinder connects to flanged vent tube. Top of head cap is solid. Area between inside and outside cylinders is open on bottom.

***** **Aura Breather Vent is wind driven without any moving parts. It is noiseless and maintenance free. It does not require electricity.** *****

- E. Operation: Ventilator is wind driven, noiseless, and maintenance free. Outside air moving against vanes of outer cylinder is directed to create circular air flow inside ventilator. This air movement creates venturi effect which produces negative pressure that pulls water vapor from roof assembly and expels it to exterior. Vents with moving parts or electrical operation are not acceptable.

***** **Aura Breather Vent is equipped with a mylar membrane damper. This damper functions as a one-way valve allowing vapor to dissipate while preventing re-entry of moisture. When the roof membrane warms in the sun, moist air expands forcing the mylar membrane to open outward allowing moisture to escape. When the roof cools or outside humidity and air pressure increases, cool moist air has a tendency to be drawn into the vent. The mylar membrane cannot open inward and closes preventing moisture from entering the roof assembly.** *****

- F. One-way damper: Roof vent to contain damper with mylar membrane flap which opens outward allowing moisture to escape roof assembly. Mylar flap closes when exterior moist air attempts to flow inward. Factory install damper into base of vent tube.

G. Size:

1. Tube diameter: [6 inches.] [152 mm.]
2. Roof flange diameter: [11-1/2 inches/] [191 mm.]
3. Cap: [10-1/2 inches] [267 mm] diameter by [3 inches] [76 mm] high.
4. Overall vent height with cap: [10-1/2 inches.] [267 mm.]

H. Fasteners: Corrosion resistant screws, nails, or other fasteners of type, size, and spacing as recommended by manufacturer for application and type of roof substrate.

PART 3 - EXECUTION**3.1 INSTALLATION**

******* Typically breather roof vents are installed as part of the roof system. They can also be installed separately prior to roofing operation and they can be added to existing roofs. *******

- A. [Install roof vents as part of] [Coordinate provision of roof vents with installation of] roof system specified in Section [_____] - [_____].
- B. Install roof vents in accordance with manufacturer's instructions and approved shop drawings.

******* Placement and spacing of roof vents will depend of project conditions and requirements. As a general rule, roof vents are spaced approximately 1 per 1,000 square feet (100 square meters). *******

- C. Locate vents as [indicated on Drawings.] [uniformly spaced with approximately one vent per [1,000 square feet] [100 square meters].]
- D. Install vents after application of roof deck vapor barrier. Center vent over [4 inches] [102 mm] maximum diameter hole cut in vapor barrier.
- E. Securely anchor flange to roof substrate with fasteners of type, size, and spacing recommended by manufacturer. Vent cap can be temporarily removed for installation.
- F. Seal vent flange as part of roof membrane application.

END OF SECTION