U.S. DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY National Flood Insurance Program

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

Expiration Date: July 31, 2015

3-01764

SECTION A - PROPERTY INFORMATION FOR INSURANCE COMPANY USE A1. Building Owner's Name John P. Ryan and Judy M. Miller Policy Number: A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Company NAIC Number. 5215 River Road, S. City Salem State OR A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Tax Lot 2400, Map 8 4W 14A A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential A5. Latitude/Longitude: Lat. 44°52'50.90572"N Long. 123°08'16.51336"W Horizontal Datum: ☐ NAD 1927 ☒ NAD 1983 A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance. A7. Building Diagram Number 8 A8. For a building with a crawlspace or enclosure(s): A9. For a building with an attached garage: a) Square footage of crawlspace or enclosure(s) 1084 sq ft a) Square footage of attached garage <u>NA</u> sa ft b) Number of permanent flood openings in the crawlspace b) Number of permanent flood openings in the attached garage or enclosure(s) within 1.0 foot above adjacent grade within 1.0 foot above adjacent grade <u>NA</u> Total net area of flood openings in A9.b NA c) Total net area of flood openings in A8.b 1400 sa in sq in d) Engineered flood openings? ☑ Yes ☐ No Engineered flood openings? SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION B1. NFIP Community Name & Community Number B2. County Name B3 State Marion County 410154 Marion Oregon B4. Map/Panel Number B5. Suffix B6. FIRM Index Date **B7. FIRM Panel** B8. Flood B9. Base Flood Elevation(s) (Zone 41047C0325 January 2, 2003 Effective/Revised Date Zone(s) AO, use base flood depth) January 19, 2000 NA B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9. Other/Source: NA ☐ FIRM Community Determined ☐ FIS Profile B11. Indicate elevation datum used for BFE in Item B9: I NGVD 1929 ☐ NAVD 1988 Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes No Designation Date: ☐ CBRS ☐ OPA SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED) Building elevations are based on: ☐ Construction Drawings* ☐ Building Under Construction* *A new Elevation Certificate will be required when construction of the building is complete. C2. Elevations - Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters. Benchmark Utilized: ODOT ORGN Vertical Datum: NAVD 88 Indicate elevation datum used for the elevations in items a) through h) below. 🛮 NGVD 1929 🗆 NAVD 1988 🗆 Other/Source: _ Datum used for building elevations must be the same as that used for the BFE. Check the measurement used. □ meters a) Top of bottom floor (including basement, crawlspace, or enclosure floor) 154.2 ☐ meters b) Top of the next higher floor 161.1 meters c) Bottom of the lowest horizontal structural member (V Zones only) NA. ☐ feet NA. ☐ feet ☐ meters d) Attached garage (top of slab) e) Lowest elevation of machinery or equipment servicing the building 161.1 meters (Describe type of equipment and location in Comments) meters f) Lowest adjacent (finished) grade next to building (LAG) <u>153.8</u> meters g) Highest adjacent (finished) grade next to building (HAG) <u>158.6</u> meters h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support 152.6 SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION REGISTERED This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. PROFESSIONAL I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001. LAND SURVEYOR Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor? Check here if attachments ☐ No ame SEAL Theyele License Number LS 2451 Certifier's Name James S. Hepler **OREGON** Company Name Azimuth Surveying Title Member JULY 25, 1990 JAMES S. HEPLER City Salem State OR ZIP Code 97301 Address 2015 Market Street, NE 2451 Date 3/03/2014 503 364-0026 Signature Telephone amos S. Theyelis Expires: 6/30/1

ELEVATION CERTIFICATE, page 2	
IMPORTANT: In these spaces, copy the corresponding information from Sec	tion A. FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box 5215 River Road, S.	No. Policy Number:
City Salem State OR ZIP	Code 97302 Company NAIC Number:
SECTION D - SURVEYOR, ENGINEER, OR ARCHITEC	T CERTIFICATION (CONTINUED)
Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/co	ompany, and (3) building owner.
Comments A8c Estimated net area presumed based on 1 sq in per sq ft using 7 Smart Vent Model #1540-510 Certified by Smart Vent, Inc to cover 200sq/ft actual opening area is 864 sq inches without covering; A8d Smart Vent Model #1540-510 Certified by Smart Vent, Inc. to cover 200sq/ft; ICCES Evaluation report attached; C2 Elevations converted using VERTCON C3e Heat Pump elevated on platform affixed to building wall	
Signature James S. Heples Date 3/03	/2014
SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)	
, , , , , , , , , , , , , , , , , , ,	whether the elevation is above or below the highest adjacent et
SECTION F – PROPERTY OWNER (OR OWNER'S REP	
The property owner or owner's authorized representative who completes Sections A, B, and or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of	E for Zone A (without a FEMA-issued or community-issued BFE)
Property Owner's or Owner's Authorized Representative's Name Azimuth Surveying	
Address 2015 Market Street, NE City Salem	State OR ZIP Code 97301
Signature James S. Hyplin Date 3/03/20	14 Telephone 503 364-0026
Comments	☐ Check here if attachments
SECTION G – COMMUNITY INFORMAT	
of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measure G1. The information in Section C was taken from other documentation that has been sign is authorized by law to certify elevation information. (Indicate the source and date of A community official completed Section E for a building located in Zone A (without a G3. The following information (Items G4—G10) is provided for community floodplain man	ement used in Items G8–G10. In Puerto Rico only, enter meters. gned and sealed by a licensed surveyor, engineer, or architect who of the elevation data in the Comments area below.) a FEMA-issued or community-issued BFE) or Zone AO.
G4. Permit Number G5. Date Permit Issued G	6. Date Certificate Of Compliance/Occupancy Issued
G7. This permit has been issued for: New Construction Substantial Improv G8. Elevation of as-built lowest floor (including basement) of the building: G9. BFE or (in Zone AO) depth of flooding at the building site: G10. Community's design flood elevation: Local Official's Name Title Community Name Teleph Signature Date	☐ feet ☐ meters Datum ☐ feet ☐ meters Datum ☐ feet ☐ meters Datum
	☐ Check here if attachments

ELEVATION CERTIFICATE, page 3

Building Photographs

See Instructions for Item A6.

IMPORTANT: In these spaces, copy the corresponding information from Section A.

FOR INSURANCE COMPANY USE

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5215 River Road, S.

Policy Number:

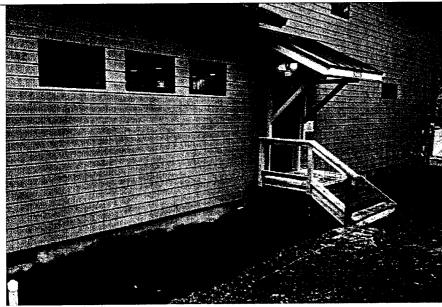
City Salem

State OR

ZIP Code 97302

Company NAIC Number:

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.



Front View 02/24/2014



Rear View 02/24/2014



ICC-ES Evaluation Report

ESR-2074*

Reissued December 1, 2012 This report is subject to renewal February 1, 2015.

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A Subsidiary of the International Code Council®

DIVISION: 08 00 00-OPENINGS

Section: 08 95 43-Vents/Foundation Flood Vents

REPORT HOLDER:

SMARTVENT PRODUCTS, INC. 430 ANDBRO DRIVE, UNIT 1 PITMAN, NEW JERSEY 08071 (877) 441-8368 www.smartvent.com info@smartvent.com

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS:
FLOODVENT™ MODEL #1540-520; FLOODVENT™
STACKING MODEL #1540-521; SMARTVENT™ MODEL
#1540-510; SMARTVENT™ STACKING MODEL #1540-511;
WOOD WALL FLOOD MODEL #1540-570; WOOD WALL
FLOOD OVERHEAD DOOR MODEL #1540-574;
FLOODVENT™ OVERHEAD DOOR MODEL #1540-524;
SMARTVENT™ OVERHEAD DOOR MODEL #1540-514

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2009 and 2006 International Building Code® (IBC)
- 2009 and 2006 International Residential Code® (IRC)

Properties evaluated:

- Physical operation
- Water flow

2.0 USES

The Smart Vent® units are automatic foundation flood vents (AFFVs) employed to equalize hydrostatic pressure on nonfire-resistance-rated foundation walls, rolling-type overhead doors and building walls subject to rising or falling flood waters. The Smart Vent® units are intended for use where flood hazard areas have been established in accordance with IBC Section 1612.3 or IRC Section R3222.1. Certain models also allow natural ventilation in accordance with Section 1203 of the IBC or Section 408.1 of the IRC.

3.0 DESCRIPTION

3.1 General:

When subjected to pressure from rising water, the Smart Vent® AFFVs disengage, then pivot open to allow flow in either direction to equalize water level and hydrostatic

pressure from one side of the foundation to the other. The AFFV pivoting door is normally held in the closed position by a buoyant release device. When subjected to rising water, the buoyant release device causes the unit to unlatch, allowing the plate to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units each contain two vertically arranged openings per unit.

3.2 Engineered Opening:

The AFFVs comply with the design principle noted in Section 2.6.2.2 of ASCE/SEI 24 for a maximum rate of rise and fall of 5.0 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Smart Vent AFFVs must be installed in accordance with Section 4.0.

3.3 Model Sizes:

The FloodVENT™ Model #1540-520, SmartVENT™ Model #1540-510, FloodVENT™ Overhead Door Model #1540-524, and SmartVENT™ Overhead Door Model #1540-514 units measure 15³/₄ inches wide by 7³/₄ inches high (400 by 196.9 mm). The Wood Wall Flood Model #1540-570 and Wood Wall Flood Overhead Door Model #1540-574 units measure 14 inches wide by 8³/₄ inches high (355.6 by 222.25 mm). The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units measure 16 inches wide by 16 inches high (406.4 by 406.4 mm).

3.4 Ventilation:

The SmartVENT® Model #1540-510 and SmartVENT® Overhead Door Model #1540-514 both have screen covers with ¹/₄-inch-by-¹/₄-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm²) of net free area to supply natural ventilation. The SmartVENT™ Stacking Model #1540-511 consists of two Model #1540-510 units in one assembly, and provides 102 square inches (65 806 mm²) of net free area to supply natural ventilation. Other AFFVs recognized in this report do not offer natural ventilation.

4.0 INSTALLATION

SmartVENT[®] and FloodVENT[™] are designed to be installed into walls or overhead doors of existing or new construction from the exterior side. Installation of the vents must be in accordance with the manufacturer's instructions, the applicable code and this report. The mounting straps allow mounting in wood, masonry and

*Revised July 2013

concrete walls up to 12 inches (305 mm) thick. In order to comply with the engineered opening design principle noted in Section 2.6.2.2 of ASCE/SEI 24, the Smart Vent® AFFVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one AFFV for every 200 square feet (18.6 m²) of enclosed area, except that the SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 must be installed with a minimum of one AFFV for every 400 square feet (37.2 m²) of enclosed area.
- Below the base flood elevation.
- With the bottom of the AFFV located a maximum of 12 inches (305.4 mm) above grade.

5.0 CONDITIONS OF USE

The Smart Vent[®] AFFVs described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The Smart Vent® AFFVs must be installed in accordance with this report, the applicable code and the manufacturer's installation instructions. In the event of a conflict, the instructions in this report govern.
- 5.2 The Smart Vent[®] AFFVs must not be used in the place of "breakaway walls" in coastal high hazard areas, but are permitted for use in conjunction with breakaway walls in other areas.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Automatic Foundation Flood Vents (AC364), dated October 2007.

7.0 IDENTIFICATION

The Smart VENT® models recognized in this report must be identified by a label bearing the manufacturer's name (Smartvent Products, Inc.), the model number, and the evaluation report number (ESR-2074).



ICC-ES Evaluation Report

ESR-2074 FBC Supplement

Issued July 1, 2013

This report is subject to renewal February 1, 2015.

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A Subsidiary of the International Code Council®

DIVISION: 08 00 00-OPENINGS

Section: 08 95 43-Vents/Foundation Flood Vents

REPORT HOLDER:

SMARTVENT PRODUCTS, INC. 430 ANDBRO DRIVE, UNIT 1 PITMAN, NEW JERSEY 08071 (877) 441-8368 www.smartvent.com info@smartvent.com

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: FLOODVENT™ MODEL #1540-520; FLOODVENT™ STACKING MODEL #1540-521; SMARTVENT™ MODEL #1540-510; SMARTVENT™ STACKING MODEL #1540-511; WOOD WALL FLOOD MODEL #1540-570; WOOD WALL FLOOD OVERHEAD DOOR MODEL #1540-574; FLOODVENT™ OVERHEAD DOOR MODEL #1540-524; SMARTVENT™ OVERHEAD DOOR MODEL #1540-514

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, recognized in ICC-ES master report ESR-2074, have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2010 Florida Building Code—Building (FBC)
- 2010 Florida Building Code—Residential (FRC)

2.0 CONCLUSIONS

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2074, comply with the FBC and the FRC, provided the design and installation are in accordance with the International Building Code® provisions noted in the master report.

Use of the Smart Vent® Automatic Foundation Flood Vents has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the FBC and the FRC for structures not subject to FBC Section 2326.3.1 or FRC Section 4409.13.3.1, as applicable.

For products falling under Florida Rule 9N-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the master report, reissued December 1, 2012, revised July 2013.

