U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency National Flood Insurance Program

OMB No. 1660-0008 Expiration Date: November 30, 2018

ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A - PROPERTY INFORMATION	FOR INSU	RANCE COMPANY USE
A1. Building Owner's Name	Policy Num	nber:
Fran Barnes		
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.5709 Winchester Avenue	Company N	NAIC Number:
City State	ZIP Code	
Ventnor New Jersey	08406	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Block 112, Lot 4		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential		
A5. Latitude/Longitude: Lat. N39°20'30.7" Long. W74°28'35.7" Horizontal Datu	n: NAD	1927 🗵 NAD 1983
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insur	ance.	
A7. Building Diagram Number 7		
A8. For a building with a crawlspace or enclosure(s):		
a) Square footage of crawlspace or enclosure(s) 682 sq ft		
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above	adjacent gr	ade 4
c) Total net area of flood openings in A8.b 800 sq in		Printer and the Control of the Contr
d) Engineered flood openings? 🛛 Yes 🔲 No		
A9. For a building with an attached garage:		7
, i		
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent	grade	. 0
c) Total net area of flood openings in A9.b		
d) Engineered flood openings? ☐ Yes ☒ No		
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMA	TION	
B1. NFIP Community Name & Community Number B2. County Name Ventnor 345326 Atlantic		B3. State New Jersey
	1	
B4. Map/Panel B5. Suffix B6. FIRM Index B7. FIRM Panel B8. Flood Zone(s Date Effective/	(Zo	se Flood Elevation(s) ne AO, use Base
345326/0001 B 06/18/1971 Revised Date 09/15/1983 A8	10.00	od Depth)
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter	n B9:	
☐ FIS Profile ☑ FIRM ☐ Community Determined ☐ Other/Source:		
B11. Indicate elevation datum used for BFE in Item B9: X NGVD 1929 X NAVD 1988 X OF	ner/Source:	
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Prote	cted Area (0	DPA)? ☐ Yes ☒ No
Designation Date: ☐ CBRS ☐ OPA	·	
		and the second s

ELEVATION CERTIFICATE

OMB No. 1660-0008 Expiration Date: November 30, 2018

	RTANT: In these spaces, copy the corresponding infor		·	FOR INSURANCE COMPANY USE
	ng Street Address (including Apt., Unit, Suite, and/or Bldg. Winchester Avenue	. No.) or P.O. Route	e and Box No.	Policy Number:
City Ventr	State or New Jers	ZIP 0 sey 08400		Company NAIC Number
i	SECTION C - BUILDING ELEVAT	TION INFORMATI	ON (SURVEY	REQUIRED)
	Building elevations are based on: Construction Dra *A new Elevation Certificate will be required when constru Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V	iction of the buildin /1–V30, V (with BF	g is complete. E), AR, AR/A, A	R/AE, AR/A1–A30, AR/AH, AR/AO.
	Complete Items C2.a-h below according to the building d Benchmark Utilized: RM#1	agram specified in Vertical Datum: <u>l</u>		erto Rico only, enter meters.
	Indicate elevation datum used for the elevations in items a NGVD 1929 NAVD 1988 Other/Source Datum used for building elevations must be the same as t	e:		
	a) Top of bottom floor (including basement, crawlspace, of	or enclosure floor)	6.3	Check the measurement used
	b) Top of the next higher floor	or cholosure hoor,	13 4	X feet meters
	c) Bottom of the lowest horizontal structural member (V Z	'ones only)	 N/A	X feet meters
	d) Attached garage (top of slab)	,	N/A	X feet _ meters
	e) Lowest elevation of machinery or equipment servicing (Describe type of equipment and location in Comments	the building s)	<u>13</u> . <u>3</u>	[X] feet
	f) Lowest adjacent (finished) grade next to building (LAG	i)	6.3	ifeet ☐ meters
	g) Highest adjacent (finished) grade next to building (HAG	G)	6, 3	🔀 feet 🗌 meters
	 Lowest adjacent grade at lowest elevation of deck or s structural support 	tairs, including	<u>6</u> . 0	X feet
	SECTION D – SURVEYOR, ENG	INEER, OR ARCI	HITECT CERTI	FICATION
l cer state	certification is to be signed and sealed by a land surveyor tify that the information on this Certificate represents my b ement may be punishable by fine or imprisonment under 1	est efforts to interp 8 U.S. Code, Section	ret the data ava on 1001.	ilable. I understand that any false
Wer	e latitude and longitude in Section A provided by a license	d land surveyor?	⊠Yes ☐ No	
		ense Number		
Jame Title	es R. Boney, PLS 312	04		
	essional Land Surveyor			
	pany Name es R. Boney & Associates, LLC		and the state of t	Place Seal
Addr 13 S	ess tone Mill Court			Heré
City Egg	Stat Harbor Twp New		ZIP Code 08234	
Sign			Telephone (609) 788-8013	
Сору	all pages of this Elevation Certificate and all attachments for	r (1) community office	cial, (2) insurance	e agent/company, and (3) building owner.
One : side).	ments (including type of equipment and location, per C2(e) story dwelling that has been raised onto a 22'x31' three-wa. The remaining 36 feet of the house is over the water sup mechanicals are inside and are at or above the finished fl	alled full story conc ported by pilings. T	he A/C Unit is o	n a platform outside. It is assumed that

ELEVATION CERTIFICATE

OMB No. 1660-0008 Expiration Date: November 30, 2018

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. Policy Number: 5709 Winchester Avenue State ZIP Code Company NAIC Number City Ventnor New Jersey 08406 SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE) For Zones AO and A (without BFE), complete Items E1-E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1-E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG). a) Top of bottom floor (including basement, crawlspace, or enclosure) is feet meters above or below the HAG. b) Top of bottom floor (including basement, crawlspace, or enclosure) is feet meters above or below the LAG. E2. For Building Diagrams 6-9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 1-2 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is __. _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG. E3. Attached garage (top of slab) is _ | feet | meters above or below the HAG. E4. Top of platform of machinery and/or equipment servicing the building is ____ feet meters above or below the HAG. E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? Yes No Unknown. The local official must certify this information in Section G. SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge. Property Owner or Owner's Authorized Representative's Name Address City State ZIP Code Signature Date Telephone Comments Check here if attachments.

ELEVATION CERTIFICATE

OMB No. 1660-0008 Expiration Date: November 30, 2018

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. Policy Number: 5709 Winchester Avenue City State ZIP Code Company NAIC Number 08406 Ventnor New Jersey SECTION G - COMMUNITY INFORMATION (OPTIONAL) The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8-G10. In Puerto Rico only, enter meters. The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.) A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO. The following information (Items G4-G10) is provided for community floodplain management purposes. G4. Permit Number G5. Date Permit Issued G6. Date Certificate of Compliance/Occupancy Issued G7. This permit has been issued for: New Construction Substantial Improvement Elevation of as-built lowest floor (including basement) feet meters of the building: Datum BFE or (in Zone AO) depth of flooding at the building site: feet meters Datum G10. Community's design flood elevation: ☐ feet ☐ meters Datum Local Official's Name Title <u>LAVALI</u> Community Name Telephone Signature Comments (including type of equipment and location, per C2(e), if applicable) Check here if attachments.

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

See Instructions for Item A6.

OMB No. 1660-0008 Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5709 Winchester Avenue		FOR INSURANCE COMPANY USE Policy Number:	
Ventnor	New Jersey	08406	

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.



Photo One

Photo One Caption Front 08/13/2018



Photo Two

Photo Two Caption Rear View 08-13-18

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

Continuation Page

OMB No. 1660-0008 Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5709 Winchester Avenue		FOR INSURANCE COMPANY USE Policy Number:	
Ventnor	New Jersey	08406	

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. 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.

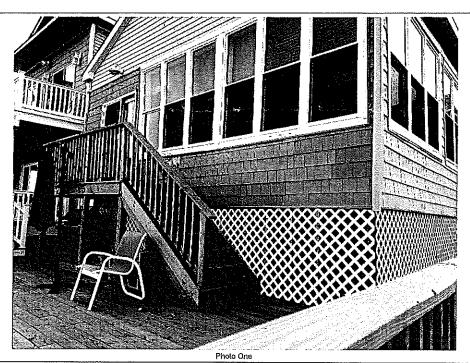


Photo One Caption Rear View of Dwelling (portion over water) 08/13/2018

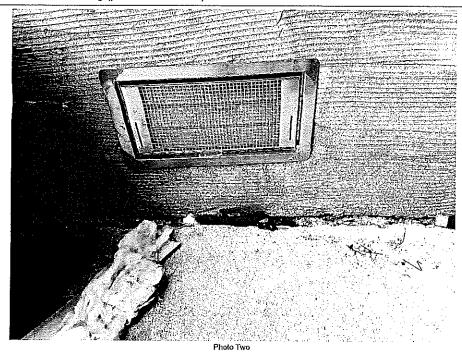


Photo Two Caption Smart Vent (one of four) 08/13/2018



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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

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514



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ICC-ES Evaluation Report

ESR-2074

Reissued February 2017

This report is subject to renewal February 2019.

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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: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2015, 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2015, 2012, 2009 and 2006 International Residential Code® (IRC)
- 2013 Abu Dhabi International Building Code (ADIBC)[†]

[†]The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Physical operation
- Water flow

2.0 USES

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

3.0 DESCRIPTION

3.1 General:

When subjected to rising water, the Smart Vent[®] FVs internal floats are activated, 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 FV 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 door to rotate out of the way and allow flow.

The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. 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 FVs comply with the design principle noted in Section 2.7.2.2 and Section 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)] 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 FVs must be installed in accordance with Section 4.0.

3.3 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 FVs recognized in this report do not offer natural ventilation.

4.0 DESIGN AND 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. Installation clips allow mounting in masonry and concrete walls of any thickness. In order to comply with the engineered opening design principle noted in Section 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)], the Smart Vent® FVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV 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 FV for every 400 square feet (37.2 m²) of enclosed area.
- Below the base flood elevation.

■ With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final grade or floor and finished exterior grade immediately under each opening.

5.0 CONDITIONS OF USE

The Smart Vent[®] FVs 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[®] FVs 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® FVs 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 Mechanically Operated Flood Vents (AC364), dated August 2015.

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).

TABLE 1-MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	15 ³ / ₄ " X 7 ³ / ₄ "	200
SmartVENT®	1540-510	15 ³ / ₄ " X 7 ³ / ₄ "	200
FloodVENT® Overhead Door	1540-524	15 ³ / ₄ " X 7 ³ / ₄ "	200
SmartVENT® Overhead Door	1540-514	15 ³ / ₄ " X 7 ³ / ₄ "	200
Wood Wall FloodVENT®	1540-570	14" X 8 ³ / ₄ "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 ³ / ₄ "	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent [®] Stacker	1540-521	16" X 16"	400

For SI: 1 inch = 25.4 mm; 1 square foot = m^2

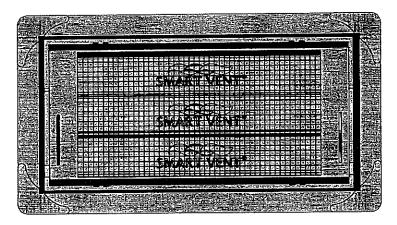


FIGURE 1-SMART VENT: MODEL 1540-510

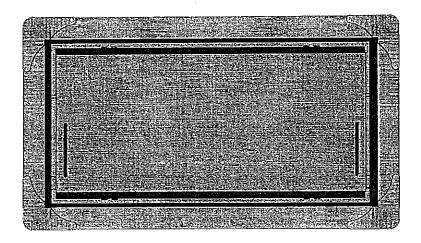


FIGURE 2-SMART VENT MODEL 1540-520

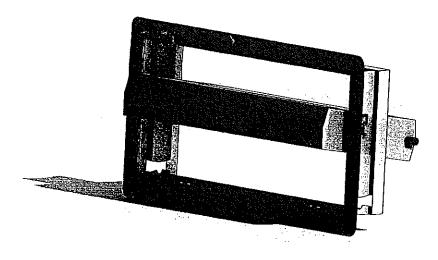


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



ICC-ES Evaluation Report

ESR-2074 CBC and CRC Supplement

Issued January 2017

This report is subject to renewal February 2019.

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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: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #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 evaluation report ESR-2074, have also been evaluated for compliance with codes noted below.

Applicable code edition:

- 2016 California Building Code (CBC)
- 2016 California Residential Code (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Smart Vent[®] Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2074, comply with 2016 CBC Chapter 12, provided the design and installation are in accordance with the 2015 International Building Code[®] (IBC) provisions noted in the master report and the additional requirements of CBC Chapters 12, 16 and 16A, as applicable.

The products recognized in this supplement have not been evaluated under CBC Chapter 7A for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area.

2.2 CRC:

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 2016 CRC, provided the design and installation are in accordance with the 2015 *International Residential Code*® (IRC) provisions noted in the master report.

The products recognized in this supplement have not been evaluated under 2016 CRC Chapter R337, for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area.

The products recognized in this supplement have not been evaluated for compliance with the International Wildland-Urban Interface Code[®].

This supplement expires concurrently with the master report, reissued February 2017.



ICC-ES Evaluation Report

ESR-2074 FBC Supplement

Reissued February 2017

This report is subject to renewal February 2019.

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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:

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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:

- 2014 Florida Building Code—Building (FBC)
- 2014 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 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 February 2017.

