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.

	SECT	ION A - PROPERTY I	NFOR	MATION		FOR INSUR	ANCE COMPANY USE
A1. Building Owner	r's Name					Policy Numb	per:
Pamela M. Dunleav	-					##V A	
Box No.		uding Apt., Unit, Suite	, and/or	r Bldg. No.) or P.O.	Route and	Company N	AIC Number:
#119 North Avolyn	Avenue			Otata		ZIP Code	
City CITY OF VENT				State New Jersey		08406	
A3. Property Descr Block 174 Lot 7	iption (Lot an	d Block Numbers, Tax	Parcel	Number, Legal Des	scription, etc.)	•	and the state of t
A4. Building Use (e	.g., Resident	ial, Non-Residential, A	ddition,	, Accessory, etc.)	RESIDENTIAL		
A5. Latitude/Longit	ude: Lat. <u>39</u>	.3387	_ong. <u>-7</u>	4.4063	Horizontal Datun	n: NAD 1	927 🗵 NAD 1983
A6. Attach at least	2 photograph	s of the building if the	Certific	ate is being used to	obtain flood insura	ance.	
A7. Building Diagra	m Number _	7					
A8. For a building v	vith a crawlsp	ace or enclosure(s):					
a) Square foot	age of crawls	pace or enclosure(s)		1,055 sq ft			
b) Number of p	ermanent flo	od openings in the cra	wlspac	e or enclosure(s) wi	thin 1.0 foot above	adjacent gr	ade6
c) Total net are	ea of flood op	enings in A8.b1,20	00 s	q in			
d) Engineered	flood opening	gs? ⊠ Yes 🗌 No)				
A9. For a building v	vith an attach	ed garage:					
a) Square foot	age of attach	ed garage0		sq ft			
		od openings in the atta	ached g	garage within 1.0 foo	ot above adjacent	grade	0
c) Total net are	ea of flood op	enings in A9.b	0	sq in			
d) Engineered	flood opening	gs? ☐ Yes ☒ N	o				
	SE	CTION B - FLOOD IN	ISURA	NCE RATE MAP	(FIRM) INFORMA	TION	
B1. NFIP Communi		.,		B2. County Name			B3. State
CITY OF VENTNO				ATLANTIC COUN	TY		New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	E	IRM Panel ffective/ evised Date	B8. Flood Zone(s	(Zo	se Flood Elevation(s) ne AO, use Base od Depth)
345326/0001	В	06/18/1971		/1983	A8**	10**	
		Base Flood Elevation (epth entered in Iten	n B9:	
		sed for BFE in Item B9			.VD 1988 ☐ O	her/Source:	
						acted Area ((DPA)? TYes [X] No
					Of Otherwise Flor	SOLEU NIEG (DPA)? ☐ Yes ⊠ No
Designation E)ate:		CBRS	☐ OPA			

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corresponding information from Sect	ion A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route #119 North Avolyn Avenue	e and Box No.	Policy Number:
City State ZIP C		Company NAIC Number
CITY OF VENTNOR New Jersey 08406	5	
SECTION C – BUILDING ELEVATION INFORMATI		
C1. Building elevations are based on: Construction Drawings* Build		uction* X Finished Construction
*A new Elevation Certificate will be required when construction of the building	g is complete.	IAP ADIA4 ASO ADIAU ADIAO
C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BF Complete Items C2.a–h below according to the building diagram specified in	iltem A7. In Puert	o Rico only, enter meters.
Benchmark Utilized: private Vertical Datum: 1		
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 BF	-E.	
		Check the measurement used.
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)		
b) Top of the next higher floor	<u>16</u> . 7	
c) Bottom of the lowest horizontal structural member (V Zones only)	N/A.	
d) Attached garage (top of slab)	N/A,	<u> </u>
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	12, 6	X feet meters
f) Lowest adjacent (finished) grade next to building (LAG)	<u></u>	X feet
g) Highest adjacent (finished) grade next to building (HAG)	<u>7</u> . <u>8</u>	X feet
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	<u>7</u> . <u>1</u>	X feet meters
SECTION D – SURVEYOR, ENGINEER, OR ARC	HITECT CERTIF	ICATION
This certification is to be signed and sealed by a land surveyor, engineer, or arch I certify that the information on this Certificate represents my best efforts to interpstatement may be punishable by fine or imprisonment under 18 U.S. Code, Secti	itact authorized by	y law to certify elevation information.
Were latitude and longitude in Section A provided by a licensed land surveyor?	⊠Yes □No	⊠ Check here if attachments.
Certifier's Name License Number		
Paul M. Koelling, PLS, CFM NJ24GS 04328800		
Title Licensed Land Surveyor		
Company Name		Place
Paul Koelling & Associates, LLC NJ C.O.A. No. 24GA28256300		Seal — Here
Address 2161 Shore Road		
City State Linwood New Jersey	ZIP Code 08221	
Signature Date 5-16-191	Telephone (609) 927-0279	
Copy all pages of this Elevation Certificate and all attachments for (1) community off	icial, (2) insurance	agent/company, and (3) building owner.
Comments (including type of equipment and location, per C2(e), if applicable)		
*A8b.) Smart Vents Model #1540-510 engineered for 200 square inches of net at **B8 & B9.) FEMA Pre-FIRM Zone "AE"Base Flood Elevation 9 ft. (NAVD88)	converted = 10.31	
****C2e.) exterior air unit (elev 14.1)ductwork elev (elev 12.9)furnace (elev	is./)water ne.	alei (ciev 12.0)
		<u>.</u>

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the correspon	ding information fro	m Section A.	FOR INSURAN	CE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and	nd/or Bldg. No.) or P.	D. Route and Box No.	Policy Number:	
#119 North Avolyn Avenue				
City	State	ZIP Code	Company NAIC	Number
CITY OF VENTNOR	New Jersey	08406		
SECTION E – BUILDING E FOR ZOI	LEVATION INFORM NE AO AND ZONE	NATION (SURVEY N A (WITHOUT BFE)	OT REQUIRED)	
For Zones AO and A (without BFE), complete Items E complete Sections A, B,and C. For Items E1–E4, use enter meters.	e natural grade, if avai	lable, Check the meas	urement asea. III i a	ieno ruco omy,
E1. Provide elevation information for the following ar the highest adjacent grade (HAG) and the lowes	nd check the appropri t adjacent grade (LAC	ate boxes to show whe	tner the elevation is	adove or delow
a) Top of bottom floor (including basement, crawlspace, or enclosure) is		feet me	eters 🔲 above or	below the HAG.
b) Top of bottom floor (including basement, crawlspace, or enclosure) is		[] feet [] me		below the LAG.
E2. For Building Diagrams 6–9 with permanent flood	l openings provided in	Section A Items 8 and	i/or 9 (see pages 1–	2 of Instructions),
the next higher floor (elevation C2.b in the diagrams) of the building is		feet m		below the HAG.
E3. Attached garage (top of slab) is		[] feet [] m	eters 🔲 above or	below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is		feet me	eters 🔲 above or	below the HAG.
E5. Zone AO only: If no flood depth number is availar floodplain management ordinance? Yes	able, is the top of the t	oottom floor elevated ir 1. The local official mu	accordance with the ust certify this inform	e community's nation in Section G.
SECTION F - PROPERTY OF	WNER (OR OWNER'	S REPRESENTATIVE) CERTIFICATION	
The property owner or owner's authorized representation community-issued BFE) or Zone AO must sign here.	ativo who completes S	Sections A. B. and F.fo.	r Zone A (without a l	FEMA-issued or of my knowledge.
Property Owner or Owner's Authorized Representative				A A A A A A A A A A A A A A A A A A A
Address	Cit	у	State	ZIP Code
Signature	Da	te	Telephone	
Comments		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Comments				
			☐ Check	here if attachments.

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corre	esponding information f	from Section A.		FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, St #119 North Avolyn Avenue	uite, and/or Bldg. No.) or i	P.O. Route and Box I		Policy Number:
City	State	ZIP Code		Company NAIC Number
CITY OF VENTNOR .	New Jersey	08406		
SECTIO	ON G - COMMUNITY INF	ORMATION (OPTIO	NAL)	
The local official who is authorized by law or or Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, en	Certificate, Complete the	community's floodpla applicable item(s) ar	ain mana nd sign l	agement ordinance can complete pelow. Check the measurement
G1. The information in Section C was tak engineer, or architect who is authoriz data in the Comments area below.)				
G2. A community official completed Secti or Zone AO.	on E for a building located	d in Zone A (without a	a FEMA	issued or community-issued BFE)
G3. The following information (Items G4-	G10) is provided for comr	munity floodplain mar	nagemei	nt purposes.
G4. Permit Number	G5. Date Permit Issued			ate Certificate of ompliance/Occupancy Issued
G7. This permit has been issued for:	New Construction S	ubstantial Improveme	ent	
G8. Elevation of as-built lowest floor (including of the building:	; basement)] feet	meters Datum
G9. BFE or (in Zone AO) depth of flooding at t	the building site:] feet	meters Datum
G10. Community's design flood elevation:	tradition to account or the second	· · · · · · · · · · · · · · · · · · ·] feet [meters Datum
Local Official's Name Dino Caraliani	7	C.F.W	<u> </u>	
Community Name	Т	relephone		
Ventron			823	-7981
Signature	Ľ	Date 5 - 2-4	! ~(8	
Comments (including type of equipment and loc	ation, per C2(e), if applica			
				Check here if attachments.

Building Photographs

Building Street Address (including Apt., Unit, Suite, and/or Bldg.) No. or P.O. Route and Box No.
#119 North Avolyn Avenue

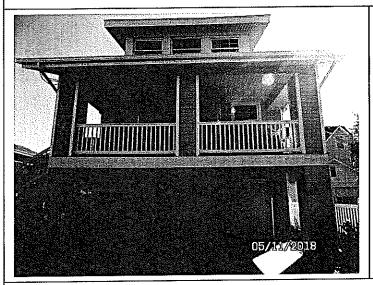
City State ZIP Code Ventnor New Jersey 08406

For Insurance Company Use:

Company Naic Number

Company NAIC Number

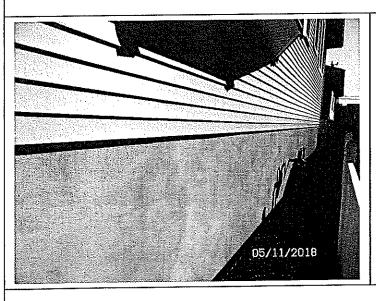
If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two building photographs below according to the instructions for Item A6. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." If submitting more photographs than will fit on this page, use the Continuation Page on the reverse.

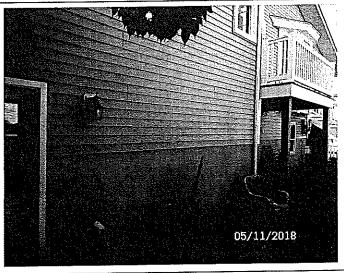




Front View - Date of Photograph: (See Photo Stamp)

Rear View - Date of Photograph: (See Photo Stamp)





Right Side View - Date of Photograph: (See Photo Stamp)

Left Side View - Date of Photograph: (See Photo Stamp)



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ESR-2074

Reissued 02/2017 This report is subject to renewal 02/2019.

DIVISION: 08 00 00—OPENINGS

SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

MAY 2 4 2018

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)[†]

 $^{\dagger}\text{The ADIBC}$ 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

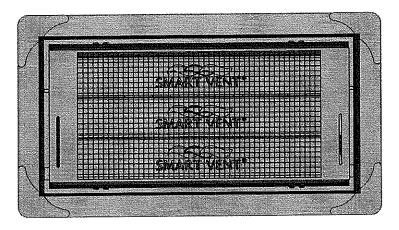


FIGURE 1-SMART VENT: MODEL 1540-510

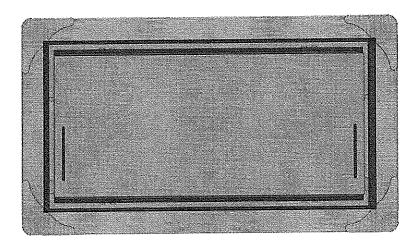


FIGURE 2—SMART VENT MODEL 1540-520

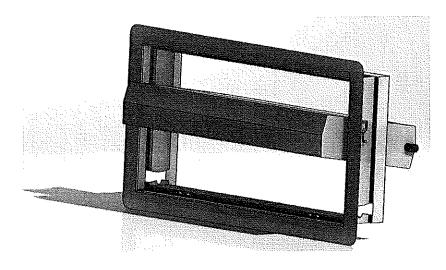


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



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.

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:

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 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.