U.S. DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency National Flood Ipsurance 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.

,		CTION A - PROPERT	Y INFOR	RMATION			FOR INSU	JRANCE COMPANY USE
A1. Building Own Thomas and Mon							Policy Nur	nber:
A2. Building Stree Box No. 96 Oregon Avenue		ncluding Apt., Unit, Sui	ite, and/o	or Bidg. No.) (or P.O. I	Route and	Company	NAIC Number:
City Waretown			-	State New Je	rsey		ZIP Code 08758	
		and Block Numbers, Ta Lot 18.01, Block 200	ax Parce	l Number, Le	gal Des	cription, et	c.)	
A4. Building Use	(e.g., Resider	ntial, Non-Residential,	Addition	, Accessory,	etc.)	Residentia	 al	
A5. Latitude/Long	itude: Lat. <u>3</u>	99° 47' 18.2" N	Long. 7	′4° 11′ 12.4″ \	<u> </u>	Horizonta	l Datum: NAD	1927 X NAD 1983
A6. Attach at leas	t 2 photograp	ohs of the building if th	e Certific	cate is being	used to			
A7. Building Diagr	am Number	6						
A8. For a building	with a crawls	space or enclosure(s):						
a) Square foo	tage of crawl	Ispace or enclosure(s)			1,463	sq ft		
b) Number of	permanent fic	ood openings in the cr	awlspac	e or enclosur	e(s) with	nin 1.0 foot	above adjacent gr	ade 8
c) Total net ar	ea of flood o	penings in A8.b		1,620 sq ir	ו			
d) Engineered	l flood openir	ngs? 🗵 Yes 🗌 N	No					
A9. For a building v	vith an attach	ned garage:						
a) Square foot	age of attach	ned garage		N/A sq ft	t			
b) Number of p	permanent flo	ood openings in the at	tached g	arage within	1.0 foot	above adja	acent grade N/A	
		penings in A9.b		N/A sq		•		
d) Engineered	flood openin	gs? ☐ Yes ☒ N	lo					
<u>.</u>		CTION B - FLOOD I	NSURA	NCE RATE	MAP (F	IRM) INF	ORMATION	
B1. NFIP Commun Ocean Township -		community Number		B2. County Ocean	Name			B3. State New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Effe	RM Panel ective/ vised Date	B8. Flo Zone(s		B9. Base Flood B (Zone AO, us	Elevation(s) se Base Flood Depth)
34029C0416	F	06-20-2018	09-29-2		AE		6	
B10. Indicate the s	ource of the I	Base Flood Elevation	(BFE) da	ata or base flo	ood dep	th entered	in Item B9:	
		Community Determined						
B11. Indicate eleva	ition datum u	sed for BFE in Item B	9: 🔲 N	GVD 1929 [⊠ NAV	D 1988	Other/Source:	
B12. Is the building	located in a	Coastal Barrier Reso	urces Sy	stem (CBRS)) area o	r Otherwise	e Protected Area (OPA)? ☐ Yes ☒ No
Designation [CBRS	☐ OPA				, = 135 = 110

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corresponding			FOR	INSURAN	CE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/o 96 Oregon Avenue	or Bldg. No.) or P.O. Ro	oute and Box No.	Policy	Number:	
184		Code 758	Comp	any NAIC	Number
SECTION C – BUILDING EI	LEVATION INFORMA	TION (SURVEY RE	QUIR	ED)	
C1. Building elevations are based on: Constructing the New Elevation Certificate will be required when the C2. Elevations – Zones A1–A30, AE, AH, A (with BFE). Complete Items C2.a—h below according to the building Benchmark Utilized: CORS STA. DI1077 w/RTK Gondicate elevation datum used for the elevations in the NGVD 1929 NAVD 1988 Other/Datum used for building elevations must be the same a) Top of bottom floor (including basement, crawls) b) Top of the next higher floor c) Bottom of the lowest horizontal structural members d) Attached garage (top of slab) e) Lowest elevation of machinery or equipment ser (Describe type of equipment and location in Configure 1) Lowest adjacent (finished) grade next to building g) Highest adjacent (finished) grade next to building the lowest adjacent grade at lowest elevation of decrease.	ion Drawings* Bu construction of the build , VE, V1–V30, V (with B Iding diagram specified PS Vertical Datum items a) through h) below Source: ne as that used for the pace, or enclosure floor er (V Zones only) vicing the building nments) g (LAG) g (HAG)	ilding Under Constru ling is complete. BFE), AR, AR/A, AR/, in Item A7. In Puerto : NAVD 1988 ow.	etion* AE, AR o Rico	X/A1-A30, A	hed Construction AR/AH, AR/AO. meters. easurement used. meters
 h) Lowest adjacent grade at lowest elevation of dec structural support 	ck or stairs, including		3.3	× feet	meters
SECTION D - SURVEYOR	, ENGINEER, OR AR	CHITECT CERTIFIC	CATIO	N	
This certification is to be signed and sealed by a land sur I certify that the information on this Certificate represents statement may be punishable by fine or imprisonment ur Were latitude and longitude in Section A provided by a lin	s my best efforts to inte nder 18 U.S. Code, Sec	rpret the data availat ction 1001.	ole. I ur	nderstand t	ation information. hat any false if attachments.
Certifier's Name Thomas J. Murphy	License Number 24GS03720700			i di	T ig
Title Principal Company Name DW Smith Associates, LLC Address 1450 State Route 34					
City Wall Township	State New Jersey	ZIP Code 07753			
Signature Thomas	Date REVISED 11/20/2019 10-01-2019	Telephone (732) 363-5850	Ext. 109		
Copy all pages of this Elevation Certificate and all attachme		ficial, (2) insurance a	gent/co	mpany, and	d (3) building owner.
Comments (including type of equipment and location, per A8. b) 7 "SmartVent" model no. 1540-520, rated @ 200 s 1 Flood Flap - Garage Door Model, rated @ 220 s 88. AE Zone per Preliminary Firm 34029C0416G, dated B9. BFE 7 per Preliminary Firm 34029C0416G, dated 1/3 C2.e) Air conditioner on raised platform.	s.f. = 1,600 s.f. s.f. = 220 s.f. 1/30/2015.				

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the correspondence			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, 96 Oregon Avenue	and/or Bldg. No.) or P.O.	Route and Box No.	Policy Number:
City Waretown	State New Jersey	ZIP Code 08758	Company NAIC Number
SECTION E - BUILDING FOR ZO	ELEVATION INFORMA	TION (SURVEY NOT	REQUIRED)
For Zones AO and A (without BFE), complete Items complete Sections A, B,and C. For Items E1–E4, us enter meters.	E1–E5. If the Certificate	is intended to support a	LOMA or LOMR-F request, ment used. In Puerto Rico only,
E1. Provide elevation information for the following a the highest adjacent grade (HAG) and the lower a) Top of bottom floor (including basement,	nd check the appropriate st adjacent grade (LAG).	boxes to show whethe	r the elevation is above or below
crawlspace, or enclosure) is b) Top of bottom floor (including basement,		feet meter	s above or below the HAG.
crawlspace, or enclosure) is		feet _ meter	s 🔲 above or 🔲 below the LAG.
E2. For Building Diagrams 6–9 with permanent floor the next higher floor (elevation C2.b in	d openings provided in Se	ection A Items 8 and/or	9 (see pages 1–2 of Instructions),
the diagrams) of the building is			s above or below the HAG.
E3. Attached garage (top of slab) is E4. Top of platform of machinery and/or equipment			s above or below the HAG.
servicing the building is		feet meter	
E5. Zone AO only: If no flood depth number is available floodplain management ordinance? Yes	able, is the top of the bott No Unknown.	om floor elevated in acc The local official must o	cordance with the community's certify this information in Section G.
SECTION F - PROPERTY OF	WNER (OR OWNER'S R	EPRESENTATIVE) CE	RTIFICATION
The property owner or owner's authorized representation community-issued BFE) or Zone AO must sign here.	ative who completes Section The statements in Section	tions A, B, and E for Zon ons A, B, and E are corr	ne A (without a FEMA-issued or ect to the best of my knowledge.
Property Owner or Owner's Authorized Representation	ve's Name		
Address	City	Sta	te ZIP Code
Signature	Date	Tel	ephone
Comments			
			Check here if attachments.

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corres			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suit 96 Oregon Avenue		. Route and Box No.	Policy Number:
City Waretown	State New Jersey	ZIP Code 08758	Company NAIC Number
SECTION	G - COMMUNITY INFOR	MATION (OPTIONAL)	
The local official who is authorized by law or ordin Sections A, B, C (or E), and G of this Elevation C used in Items G8–G10. In Puerto Rico only, enter	ertificate. Complete the an	nmunity's floodplain ma plicable item(s) and sigr	nagement ordinance can complete below. Check the measurement
G1. The information in Section C was taken engineer, or architect who is authorized data in the Comments area below.)	from other documentation by law to certify elevation	that has been signed a information. (Indicate th	nd sealed by a licensed surveyor, e source and date of the elevation
G2. A community official completed Section or Zone AO.			· · · · · · · · · · · · · · · · · · ·
G3. The following information (Items G4–G	10) is provided for commun	ity floodplain managem	ent purposes.
G4. Permit Number	65. Date Permit Issued		Date Certificate of Compliance/Occupancy Issued
G7. This permit has been issued for:	lew Construction Subst	antial Improvement	
G8. Elevation of as-built lowest floor (including be of the building:	asement)	feet	meters Datum
G9. 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		
Community Name	Tele	phone	
Signature	Date		
Comments (including type of equipment and location	on, 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.

96 Oregon Avenue

City

State

ZIP Code

Waretown

New Jersey

08758

FOR INSURANCE COMPANY USE

Policy Number:

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.



Photo One

Photo One Caption FRONT VIEW 8/30/2019

Clear Photo One

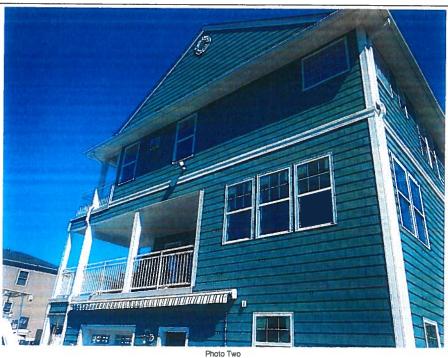


Photo Two Caption REAR VIEW 08/30/2019

Clear Photo Two

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

Continuation Page

OMB No. 1660-0008

Expiration Date: November 30, 2018

IMPORTANT: In these spaces, co	ppy the corresponding information	from Section A.	FOR INSURANCE COMPANY USE	
Building Street Address (including 96 Oregon Avenue	* '		Policy Number:	
City Waretown	State New Jersev	ZIP Code 08758	Company NAIC Number	
			31 03	

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 Three

Photo Three Caption TYPICAL FLOOD VENT 9/30/2019

Clear Photo Three



Photo Four Caption

Clear Photo Four



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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

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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ESR-2074

Reissued February 2017 Revised November 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

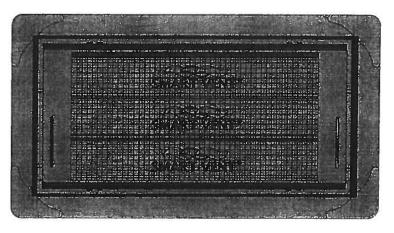


FIGURE 1—SMART VENT: MODEL 1540-510

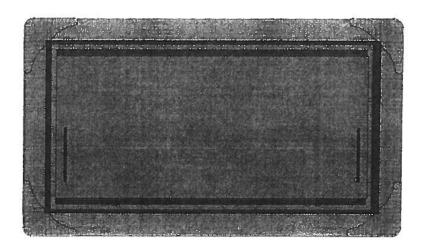


FIGURE 2—SMART VENT MODEL 1540-520

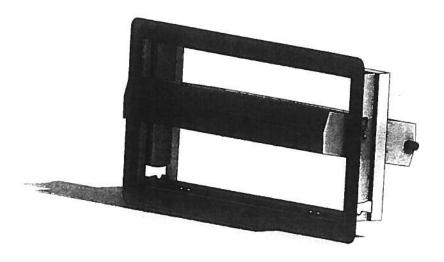


FIGURE 3-SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



ESR-2074 CBC and CRC Supplement

Issued February 2017 Revised November 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

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 and revised November 2017.



ESR-2074 FBC Supplement

Reissued February 2017 Revised November 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:

- 2017 Florida Building Code—Building
- 2017 Florida Building Code—Residential

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 *Florida Building Code—Building* and the FRC, provided the design and installation are in accordance with the 2015 *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 *Florida Building Code—Building* and the *Florida Building Code—Residential*.

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 and revised November 2017.

