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

ELEVATION CERTIFICATE

IMPORTANT: FOLLOW THE INSTRUCTIONS ON PAGES 8-15

OMB Control Number: 1660-0008 Expiration: 11/30/2018

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

		· · · · · · · · · · · · · · · · · · ·							
		A - PROPERTY INFOR	MAT	ION		FOR I	NSURANCE CO	MPANY USE	
A1. Building Owner's N Batchy Grenier	ame					Policy Num	рег:		
Box No.		ng Apt., Unit, Suite, and	or Bl	dg. No.) or P.O. I	Route and	Company N	AIC		
604 North Dudley Aven	ue					<u> </u>	I		
City Ventnor					State NJ		Zip Code	08406	
A3. Property Description Block 311 Lot 11									
A4. Building Use (e.g.,	Residential,								
A5. Latitude/Longitude:	Lat. 39°20'	57.0"N Long. 74°	29'01	Horizontal	Datum:	ONAD 1927	NAD 198	33	
A6. Attach at least 2 ph	otographs of	the building if the Certifi	cate	is being used to	obtain floo	od insurance.			
A7. Building Diagram N	umber 8								
A8. For a building with a	a crawlspace	or enclosure(s):		A9.	For a bui	lding with an atta	iched garage:		
, , -	•	or enclosure(s) 1,286			•	tage of attached			sq ft
 b) Number of perma crawispace or end 						permanent flood hed garage with	in 1.0 foot		
above adjacent g		9		al	bove adja	cent grade	n/a		
c) Total net area of t	lood opening	rs in AB.b 1,800		sqin c)Tı	otal net a	rea of flood oper	ings in A9.b n/a		sq in
d) Engineered flood	openings?			 d) E	ingineere	d flood openings	? OYes	⊙No	
		ECTION B - FLOOD INS	URA			NFORMATION		5-0-1	
B1. NFIP Community No Ventnor 345326	ame & Comr	nunity Number		B2. County Nar Atlantic	me			B3. State NJ	
84, Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7.		ective/ Ba	3. Flood Zone(s	B9. Base Flo (Zone A0 depth	ood Elevation(s), use base flo	
345326 0001	В	6/18/1971		9/15/1983		A8		10	
310. Indicate the source	of the Base I	Flood Elevation (BFE) da	ita o	r base flood depti	n entered	in Item B9:			
○FIS Profile ●FI	RM (Com	munity Determined 🔘 🤇	Other	r/Source:					
311. Indicate elevation di	atum used fo	or BFE in Item B9: 🔘 N	GVD	1929 () NAVD	1988 (Other/Source:			
312. Is the building locate	ed in a Coast	tal Barrier Resources Sy	stem	(CBRS) area or	Otherwise	e Protected Area	(OPA)? ()Y	es 💽 No	
Designation Date:			OP/						
	SECT	ION C - BUILDING ELE	VAT	ION INFORMATI	ION (SUR	VEY REQUIRE	D)		
01. Building elevations a				○Bullding U			Finished Con	struction	
A new Elevation Certification						OH GODON .	g. (
C2. Elevations: Zones A1 lems C2.a-h below accor	-A30, AE, Al	H, A (with BFE), VE, V1-	V30,	V (with BFE), AR	R, AR/A, A	R/AE, AR/A1-A y, enter meters.	30, AR/AH, AR/	AO. Complete	
Benchmark Utilized: Loca				Vertical D			•		
ndicate elevation datum i		elevations in items a) thr	ough				18		
	○ Other/s				•				i
							Chook the m	easurement us	hac
atum used for building e					_	_	_	_	,cu.
) Top of bottom floor (inc	_	ment, crawlspace, or en	closu	re floor)		.2	● feet	_	
) Top of the next higher				۰		. 0	● feet	Ometers Ometers	
) Attached garage (top o		ctural member (V Zones	only	" —		·	(e) feet	Ometers	
		quipment servicing the b	ıildir	 10		*	<u>C</u> ,.300		
(Describe type of equip	•	* *	ullull		13	. 0	⊙ feet	Ometers	
Lowest adjacent (finish	ed) grade ne	ext to building (LAG)			6	. 0	(e) feet	Ometers	
Highest adjacent (finish	ed) grade n	ext to building (HAG)			6	. 2	feet	Ometers	
Lowest adjacent grade	at lowest ele	evation of deck or stairs,	inclu	ıding			feet	meters	
structural support				_		. 8	(A) leaf	Outerers	-

ELEVATION CERTIFICATE, page 2

OMB Control Number: 1660-0008 Expiration: 11/30/2018

IMPORTANT: In these spaces, copy the corre	esnonding informat	ion from S	ection A.		FOR INSURANC	E COMPANY USE
Building Street Address (including Apt., Unit, St	uite, and/or Bldg. No.) or P.O. Ro	oute and Box	No.		
604 North Dudley Avenue	-11-5	•			Policy Number:	
City	State NJ	Zip C	ode 08406		Company NAIC Number:	
Ventuor SECTION D - S	SURVEYOR, ENGIN	EER, OR A	RCHITECT C	ERTIFIC	CATION	
and an area of the control and analysis of	land suprevot engin	eer or arch	itect authoriz	ed by lav	w to certify elevatio	n information. I certify
This certification is to be signed and sealed by a that the information on this Certificate represents punishable by fine or imprisonment under 18 U.S.	s my best errorts to in S. Code, Section 100	iterpret ine i 1.	usia avanabie	e. I unde.	rstand that any fals	e statement may be
Check here if attachments.	Were latitude and lo provided by a licent Yes ON	sed land su	Section A rveyor?			
Certifier's Name	L	cense Num				
Matthew F. Doran		20	5273	_	PLA SE	
Tille Land Surveyor	Company Name Doran Engineering				HE	
Address 840 North Main Street	City Pleasantville	State NJ	Zip Code 08232			
Signature	Date	Teleph	one			
MATTO	09-25-2018	609-64	6-3111			
Copy all pages of this Elevation Certificate for (1	\ community official.	(2) insuranc	e agent/com	pany, ar	d (3) building owne	т.
Comments (including type of equipment and loc Section C2e-Normal household machinery at fin Section A8d Smart vents model #1540-520 Property is located in FEMA Preliminary FIRM FI To convert NGVD 1929 to NAVD 1988 subtract 1 Revised 9-25-18	ation, per C2(e), if ap hished floor. lood zone AE elevatio	oplicable) on 8.0' NAVI				
11111	<u> </u>					
Signature					Date	09-25-2018
SECTION E - BUILDING ELEVATION INF	ORMATION (SURVE	Y NOT RE	QUIRED) FO	R ZONE	AO AND ZONE A	(WITHOUT BFE)
For Zones AO and A (without BFE), complete Ite Sections A, B, and C. For Items E1-E4, use natu	iral grade, il avallable	e. Check und	illégenie	m usea.	Bil doite ittee out	•
E1. Provide elevation information for the followin highest adjacent grade (HAG) and the lowes	ng and check the app at adjacent grade (LA	ropriate bo) G).	es to show w	/hether t	he elevation is abo	ve of below the
a) Top of bottom floor (including basement, or enclosure) is	crawispace,		_ Cfeet (C meter	s above or	below the HAG,
b) Top of bottom floor (including basement, or enclosure) is	 ~	_ •	feat			below the LAG.
E2, For Building Diagrams 6-9 with permanent fl higher floor (elevation C2.b in the diagrams) of the	lood openings provid he building is	ed in Sectio	n A Items 8 a	meter	(see page 8 of Insti rs above or	uctions), the next below the HAG.
E3. Attached garage (top of slab) is			_ Cfeet	Omete	rs above or	below the HAG.
E4. Top of platform of machinery and for equipm servicing the building is	-		Cfeet			below the HAG.
E5. Zone AO only: If no flood depth number is a management ordinance? OYes ONO O	Unknown. The local	official mu	st certify tria	inomia	of the Coolett C.	nmunity's 1100upiain
SECTION F - PROPE	RTY OWNER (OR O	WNER'S R	EPRESENTA	TIVE) C	ERTIFICATION	
The property owner or owner's authorized repre community-issued BFE) or Zone AO must sign	esentative who compl here. The statements	letes Sections in Sections	ns A, B, and I s A, B, and E	E for Zor are corr	ne A (without a FEI rect to the best of n	MA-issued or ly knowledge.
Property Owner or Owner's Authorized Repress						
Address	City		State		ZIP (ode
Signature	Date		Teleph	one		
Comments					-	
·					Che	k here if attachments.

ELEVATION CERTIFICATE, page 3

OMB Control Number: 1660-0008 Expiration: 11/30/2018

IMPORTANT: in these spaces, copy the corre	esponding informatio	n from Se	ction A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, St	ilte, and/or Bldg. No.) o	or P.O. Rot	ite and Box No.	Policy Number:
604 North Dudley Avenue				
City Ventnor	State NJ	Zip Coo	ie 08406	Company NAIC Number:
SECT	ION G - COMMUNITY	INFORMA	TION (OPTIONA	AL)
The local official who is authorized by law or ordi Sections A, B, C (or E), and G of this Elevation C Items G8-G10. In Puerto Rico only, enter meters	centiticate, Complete tri	e applicavi	e itelii(s) allu sig	III BEIDIF, OFFICER ATO THOUSE
or architect who is authorized by law to Comments area below.)	certify elevation inform	nation. (inu	icate the source	+
G2. A community official completed Section or Zone AO.				
G3. The following information (Items G4-G			dplain managem	nent purposes.
G4. Permit Number	G5, Date Permit Issu	ed	G6. Date Certif	icate of Compliance/Occupancy Issued
G7. This permit has been issued for: New Co		intial Impro	ovement	
G8. Elevation of as-built lowest floor (including to of the building:	pasement)	•	feetmet	ers Datum
G9. BFE or (in Zone AO) depth of flooding at the building site:		•	Ofeet Omet	ers Datum
G10. Community's design flood elevation:		•	Cfeet Cmet	ers Datum
Local Official's Name Dwo Cauc	Marie	Title Telephone	CPW	
Community Name			60%	823-2887
Signature		Date	to-1-	-18
				☐ Check here if attachments.

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE, page 4

See instructions for Item A6.

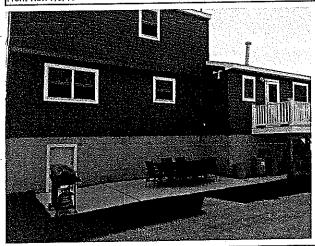
OMB Control Number: 1660-0008 Expiration: 11/30/2018

IMPORTANT: In these spaces, copy the correspo	nding informati	on from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, a 604 North Dudley Avenue			Policy Number:
City Ventnor	State NJ	Zip Code 08406	Company NAIC Number:

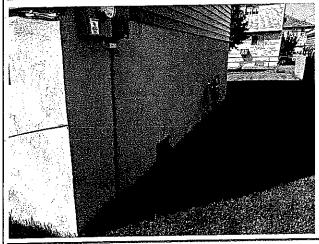
If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front view" and Rear view"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs 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 7/5/16



Rear View taken 7/12/16



Right Side View 7/12/16

BUILDING PHOTOGRAPHS

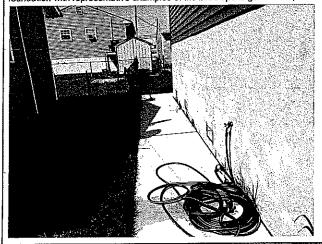
ELEVATION CERTIFICATE, page 5

Continuation Page

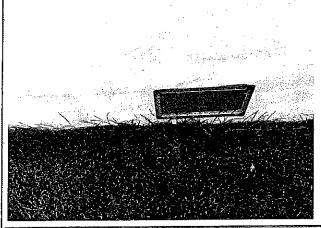
OMB Control Number: 1660-0008 Expiration: 11/30/2018

IMPORTANT: In these spaces, copy the correspondi	ng Information fro	ភា Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit,Suite, and/o 604 North Dudley Avenue	or Bidg. No.) or P.C	Route and Box No.	Palicy Number:
City Ventnor	State NJ	Zip Code 08406	Company NAIC Number:

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.



Left Side View taken 7/12/16



Typical Flood Vent 7/12/16



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ESR-2074

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

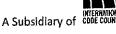


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ICC-ES Evaluation Report

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 Stacking Model #1540-511 SmartVENT® 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.)
	1540-520	15 ³ / ₄ " X 7 ³ / ₄ "	200
FloodVENT®	1540-510	15 ³ / ₄ " X 7 ³ / ₄ "	200
SmartVENT® 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
	1540-511	16" X 16"	400
SmartVENT® Stacker FloodVent® Stacker	1540-521	16" X 16"	400

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

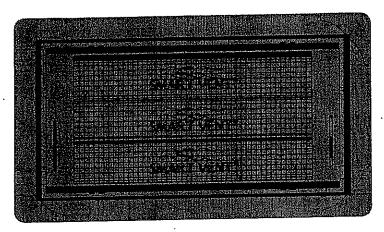


FIGURE 1-SMART VENT: MODEL 1540-510

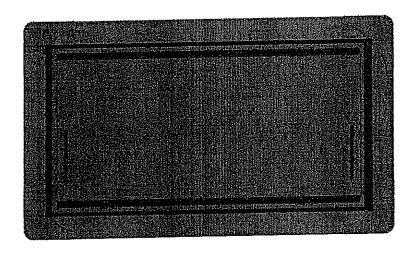


FIGURE 2—SMART VENT MODEL 1540-520

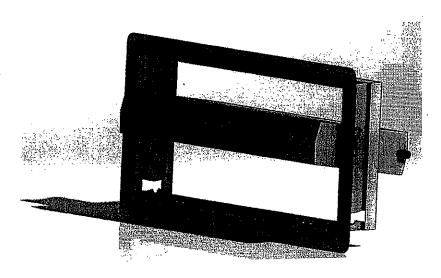


FIGURE 3-SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



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

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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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.