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

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

ELEVATION CERTIFICATEImportant: 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.

	SEC	TION A - PROPERTY	' INFOR	RMATION		FOR INSU	RANCE COMPANY USE
A1. Building Own Fernando Fernand	er's Name		···········			Policy Num	ıber:
A2. Building Stree Box No. 6401 Monmouth A	-	cluding Apt., Unit, Suit	e, and/	or Bldg. No.) or P.O	. Route and	Company I	NAIC Number:
City Ventnor				State New Jersey		ZIP Code 08406	
A3. Property Desc Block 170, Lot 1	cription (Lot a	nd Block Numbers, Ta	х Рагсе	el Number, Legal Do	escription, etc.)		
_		itial, Non-Residential,			Residential		
A5. Latitude/Longi		hs of the building if the		N74°29'04.2"	-		1927 🛛 NAD 1983
A7. Building Diagn		_	Colum	cate is being used t	o obtain nood madic	arios.	
		pace or enclosure(s):					
a) Square foo	tage of crawl	space or enclosure(s)		450 sq ft			
		ood openings in the cra	awlspad	ce or enclosure(s) w	vithin 1.0 foot above	adjacent gr	rade3
•	•		90 :	sq in			
d) Engineered	I flood openin	gs? ⊠Yes □ N	О				
A9. For a building	with an attach	ed garage:					
a) Square foot	tage of attach	ed garage350	A100FT - V	sq ft			
b) Number of	permanent flo	ood openings in the att	ached (garage within 1.0 fo	ot above adjacent g	rade	2
c) Total net are	ea of flood op	enings in A9.b4	100	sq in			ļ
d) Engineered	flood openin	gs? ⊠ Yes ☐ N	lo				
	SE	CTION B - FLOOD II	NSURA	NCE RATE MAP	(FIRM) INFORMA	TION	
B1. NFIP Communi Ventnor 345326	ty Name & C	ommunity Number		B2. County Name Atlantic	ı		B3. State 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		5/1983	A8	10.0	
		Base Flood Elevation (•		epth entered in Item	B9:	
B11, Indicate eleva	tion datum us	sed for BFE in Item B9): 🔀 N	GVD 1929 🔲 NA	.VD 1988 ☐ Oth	ner/Source:	
B12. Is the building	located in a	Coastal Barrier Resou	rces Sy	/stem (CBRS) area	or Otherwise Prote	cted Area (0	DPA)? ☐ Yes ☒ No
Designation D	ate:		CBRS	☐ OPA		•	

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corresponding	g information from S	ection A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/o 6401 Monmouth Avenue	r Bldg. No.) or P.O. R	oute and Box No.	Policy Number:
City Sta	-	P Code	Company NAIC Number
Ventnor Ne	w Jersey 08	3406	
SECTION C – BUILDING EL	EVATION INFORM	ATION (SURVEY RI	EQUIRED)
C1. Building elevations are based on: Constructi		uilding Under Constru	uction*
*A new Elevation Certificate will be required when o			
C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), Complete Items C2.a-h below according to the buil	ding diagram specifie	d in Item A7. In Puert	AE, AR/A1–A30, AR/AH, AR/AO. o Rico only, enter meters.
Benchmark Utilized: Local BM	 .	n: NGVD 1929	
Indicate elevation datum used for the elevations in i		low.	
		DEE	
Data in good for building Glovations thust be the sail	ie as triat used for the	DFG.	Check the measurement used.
 a) Top of bottom floor (including basement, crawls; 	oace, or enclosure flo	or) <u>6</u> . <u>9</u>	🔀 feet 🔲 meters
b) Top of the next higher floor		17, 0	X feet meters
c) Bottom of the lowest horizontal structural member	er (V Zones only)	N/A.	
d) Attached garage (top of slab)	•	6,8	X feet meters
 e) Lowest elevation of machinery or equipment ser (Describe type of equipment and location in Com 	vicing the building ments)	15_9	🔀 feet 🗌 meters
f) Lowest adjacent (finished) grade next to building	(LAG)	6, 9	X feet meters
g) Highest adjacent (finished) grade next to building	ı (HAG)	7.1	X feet ☐ meters
Lowest adjacent grade at lowest elevation of dec structural support	• •	6, 9	X feet meters
SECTION D – SURVEYOR,	ENGINEER OR AS	CHITECT CERTIFIC	CATION
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 un	veyor, engineer, or ar	chitect authorized by	lour to cortifu alouation information
Were latitude and longitude in Section A provided by a lic	ensed land surveyor?	⊠Yes □ No	Check here if attachments.
Certifier's Name	License Number		
James R. Boney, PLS Title	31264		1
Professional Land Surveyor			
Company Name James R. Boney & Associates, LLC			Place Seal
Address 13 Stone Mill Court			Here
City Egg Harbor Twp	State New Jersey	ZIP Code 08234	
Signature O 0-0	Date	Telephone	<u> </u>
ANNON	01/24/2018	(609) 788-8013	
Copy all pages of this Elevation Certificate and all attachmer		fficial, (2) insurance ag	jent/company, and (3) building owner.
Comments (including type of equipment and location, per Two story frame dwelling on a full story foundation. The fo 16.92. There is one (1) A/C unit outside on a elevated plat (4) SMART vents in the foundation.	undation area used fo	r parking and storage 7. All the HVAC duct	e. The main floor is at elevation work is in the attic. There are four
		,	

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corresponding	ng information fro	m Section A.		JRANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/6401 Monmouth Avenue	or Bldg. No.) or P.	O. Route and Box N		<u> </u>
Oity	tate	ZIP Code	Company	NAIC Number
¥ 0.116.10.	ew Jersey	08406	NOT DECLUDE	:D/
	AO AND ZONE	A (WITHOUT BFE)		
For Zones AO and A (without BFE), complete Items E1-complete Sections A, B,and C. For Items E1–E4, use na enter meters.	itural grade, if avai	lable. Check the me	asurement useu	, III Fuelto Nico only,
E1. Provide elevation information for the following and of the highest adjacent grade (HAG) and the lowest at a) Top of bottom floor (including basement,	check the appropri djacent grade (LAC	ate boxes to show w 6). 		
crawlspace, or enclosure) is	,	[] feet []	meters ab	ove or below the HAG.
 Top of bottom floor (including basement, crawlspace, or enclosure) is 		[] feet []	_	ove or below the LAG.
E2. For Building Diagrams 6-9 with permanent flood or	enings provided ir	Section A Items 8	and/or 9 (see pag	ges 1–2 of Instructions),
the next higher floor (elevation C2.b in the diagrams) of the building is		[] feet []	meters 🔲 ab	ove or Delow the HAG.
E3. Attached garage (top of slab) is		[] feet []	meters 🗌 ab	ove or below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is		[] feet []	meters 🗌 ab	ove or Delow the HAG.
E5. Zone AO only: If no flood depth number is available floodplain management ordinance? Yes	e, is the top of the t No	oottom floor elevated n. The local official	in accordance to must certify this	vith the community's information in Section G.
SECTION F - PROPERTY OWN	ER (OR OWNER'	REPRESENTATI	/E) CERTIFICA	TION
The property owner or owner's authorized representative community-issued BFE) or Zone AO must sign here. The	e who completes S e statements in Se	ections A, B, and E ctions A, B, and E a	for Zone A (with tre correct to the	out a FEMA-issued or best of my knowledge.
Property Owner or Owner's Authorized Representative's	Name			
Address	Cit	y	State	ZIP Code
Signature	Da	te	Telephone	
Comments				
		•		

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corre	sponding information from S	ection A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Su 6401 Monmouth Avenue	iite, and/or Bldg. No.) or P.O. R	oute and Box No.	Policy Number:
City	State ZI	P Code	Company NAIC Number
Ventnor	New Jersey 08	8406	
	NG-COMMUNITY INFORMA		
The local official who is authorized by law or ord Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, ent	Certificate. Complete the applicate the applicate meters.	cable item(s) and si	gn pelow. Check the measurement
G1. The information in Section C was take engineer, or architect who is authorized data in the Comments area below.)	ed by law to certify elevation inf	ormation. (Indicate	the source and date of the elevation
or Zone AO.			MA-issued or community-issued BFE)
G3. The following information (Items G4-	G10) is provided for community		,
G4. Permit Number	G5. Date Permit Issued	G6.	Date Certificate of Compliance/Occupancy Issued
G7. This permit has been issued for:	New Construction Substar	itial Improvement	
G8. Elevation of as-built lowest floor (including of the building:	basement)	fe	eet [] meters Datum
G9. BFE or (in Zone AO) depth of flooding at the	he building site:	fe	eet meters Datum
G10. Community's design flood elevation:		[fe	eet meters Datum
Local Official's Name	Title	C-F.W.	
Community Name	Teleph		
Community Name Vanton			23-7987
Signature	Date		
Signature		2-7-20	218
Comments (including type of equipment and loc	ation, per C2(e), if applicable)		
Comments (molading type of equipment and loc			
			·
			İ
			Ì
			İ
			İ
			Check here if attachments.

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

See Instructions for Item A6.

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

MPORTANT: In these spaces, copy the corresponding information from Section A.		FOR INSURANCE COMPANY USE	
Building Street Address (including 6401 Monmouth Avenue	Apt., Unit, Suite, and/or Bldg. No.) or	P,O. Route and Box No.	Policy Number:
City	State	ZIP Code	Company NAIC 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 Caption Front 1/24/18

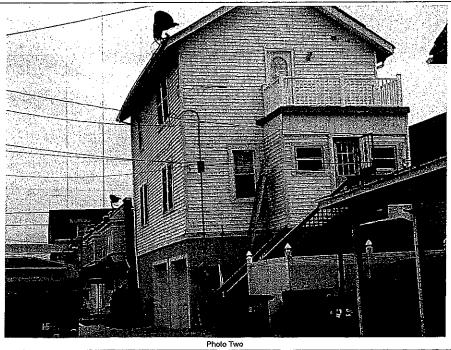


Photo Two Caption North side & Rear 1/24/18

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.			FOR INSURANCE COMPANY USE	
Building Street Address (including A 6401 Monmouth Avenue	pt., Unit, Suite, and/or Bldg. No.) ог	P.O. Route and Box No.	Policy Number:	
City	State	ZIP Code	Company NAIC 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.

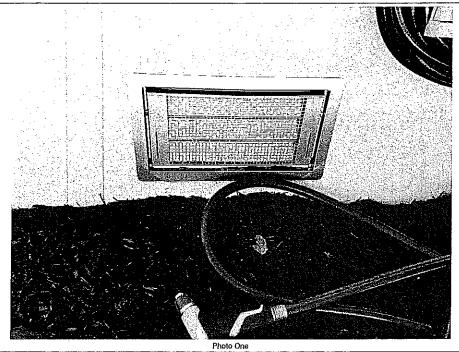


Photo One Caption Smart Vents (typical) Model 1540-510) 1/24/18

NOT AVAILABLE

Photo Two

Photo Two Caption Side 09-22-17



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ICC-ES Report

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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:

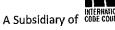
SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514



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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.)
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 = m²

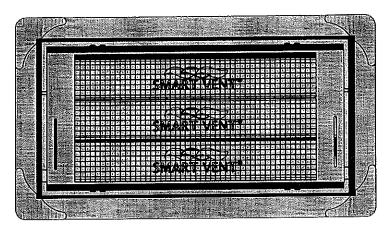


FIGURE 1—SMART VENT: MODEL 1540-510

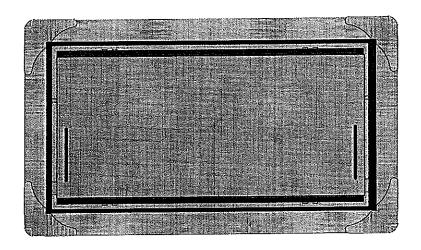


FIGURE 2—SMART VENT MODEL 1540-520

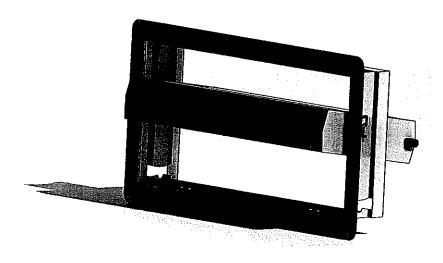


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



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:

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.

