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

OMB I	No16	60-00	98		
OMB I Expira	tion D	ate: N	oveml	ger 30,	2018
LIUI	1, 6	5 17 1	1 8	tu .	

ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

SEP 28 2016

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

SECTION A - PROPERTY INFORMATION					FOR INSU	RANCE COMPANY USE	
A1. Building Owner's Na EDWARD ROACH	A1. Building Owner's Name EDWARD ROACH Policy Number:						ber:
Box No.	A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 104 N. CLERMONT AVENUE Company NAIC Number:						
City MARGATE				State New Jersey		ZIP Code 08402	
A3. Property Description LOT 10, BLOCK 704.02	n (Lot and	d Block Numbers, Tax	Parce	l Number, Legal De	scription, etc.)		
A4. Building Use (e.g., R	Residentia	al, Non-Residential, A	ddition	, Accessory, etc.)	RESIDENTIAL		
A5. Latitude/Longitude:	Lat. 39.3	33917 L	ong. <u>- 7</u>	74.50306	Horizontal Datum	n: NAD 1	927 🗵 NAD 1983
A6. Attach at least 2 pho	otographs	s of the building if the	Certific	ate is being used to	obtain flood insura	ance.	
A7. Building Diagram Nu	ımber _	6					
A8. For a building with a	crawlspa	ace or enclosure(s):					
a) Square footage o	of crawlsp	pace or enclosure(s)		576 sq ft			
b) Number of perma	anent floo	od openings in the crav	vlspac	e or enclosure(s) w	ithin 1.0 foot above	adjacent gr	ade4
c) Total net area of f	flood ope	enings in A8.b800) s	q in	ÿ.		
d) Engineered flood	openings	s? 🗵 Yes 🗌 No					a
A9. For a building with ar	n attache	d garage:					
a) Square footage of	of attache	d garage588		sq ft			
b) Number of perma	b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 3						
c) Total net area of f	flood ope	nings in A9.b 60	00	sq in			
d) Engineered flood	openings	s? ⊠ Yes ☐ No	r.	•			
	250	TION D. FLOOD IN	CUDA	NCE DATE MAD	(CIDM) INCODMA	TION	1.1 071
D4 NEID Occurrents Nov		TION B - FLOOD IN	SURA	B2. County Name	(FIRIVI) INFORIVIA	TION	14-276 B3. State
B1. NFIP Community Nar CITY OF MARGATE CITY				ATLANTIC			New Jersey
B4. Map/Panel B5. S	Suffix	B6. FIRM Index Date	E	RM Panel fective/	B8. Flood Zone(s)	(Zoi	ee Flood Elevation(s) ne AO, use Base nd Depth)
345304 0001 C		10/18/1983		evised Date /1983	A8	10.0	од Берш)
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: [FIS Profile FIRM Community Determined Other/Source:							
B11. Indicate elevation d	datum use	ed for BFE in Item B9:	⊠N	GVD 1929 🗌 NA	VD 1988	ner/Source:	
B12. Is the building locat	ted in a C	Coastal Barrier Resour	ces Sy	stem (CBRS) area	or Otherwise Prote	cted Area (C	DPA)? ☐ Yes ⊠ No
Designation Date:	Designation Date: CBRS OPA						

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corresponding	FOR INSURANCE COMPANY USE		
Building Street Address (including Apt., Unit, Suite, and/or 504 N. CLERMONT AVENUE	Policy Number:		
City Sta MARGATE New		Code 402	Company NAIC Number
SECTION C – BUILDING EL	EVATION INFORMA	TION (SURVEY R	EQUIRED)
C1. Building elevations are based on: Construction *A new Elevation Certificate will be required when one C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), Complete Items C2.a–h below according to the build Benchmark Utilized: LOCAL BENCH Indicate elevation datum used for the elevations in it	VE, V1–V30, V (with I ding diagram specified Vertical Datum	ding is complete. BFE), AR, AR/A, AR/ I in Item A7. In Puert n: NGVD 1929	/AE, AR/A1–A30, AR/AH, AR/AO.
NGVD 1929 NAVD 1988 □ Other/S	5 A25 E	ow.	
Datum used for building elevations must be the sam		BFE.	Check the magnifement used
a) Top of bottom floor (including basement, crawlspb) Top of the next higher floor	ace, or enclosure floo	r)8. <u>8</u> 17. <u>2</u>	Check the measurement used.
c) Bottom of the lowest horizontal structural membe	r (V Zones only)	N/A	X feet meters
d) Attached garage (top of slab)		<u> </u>	X feet meters
 e) Lowest elevation of machinery or equipment serv (Describe type of equipment and location in Com 	ricing the building ments)	13. 8	X feet meters
f) Lowest adjacent (finished) grade next to building	(LAG)	<u> </u>	X feet meters
g) Highest adjacent (finished) grade next to building	(HAG)	8.2	X feet meters
 h) Lowest adjacent grade at lowest elevation of dec structural support 	κ or stairs, including	<u>7</u> . <u>6</u>	X feet meters
SECTION D – SURVEYOR,	ENGINEER, OR AR	CHITECT CERTIFI	CATION 14-276
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 und	my best efforts to inte der 18 U.S. Code, Se	erpret the data availa ction 1001. ——————————————————————————————————	law to certify elevation information. ble. I understand that any false
Were latitude and longitude in Section A provided by a lic	ensed land surveyor?	⊠Yes □ No	Check here if attachments.
Certifier's Name HOWARD A. TRANSUE	License Number GS33541		
Title PROFESSIONAL LAND SURVEYOR			9/22/2016
Company Name SCHAEFFER NASSAR SCHEIDEGG, CE, LLC			Place Seal Here
Address 1425 CANTILLON BOULEVARD		II .	Ha.Z
City MAYS LANDING	State New Jersey	ZIP Code 08330	
Signature AAA. C	Date 09/22/2016	Telephone (609) 625-7400	
Copy all pages of this Elevation Certificate and all attachmen	its for (1) community o	fficial, (2) insurance a	gent/company, and (3) building owner.
Comments (including type of equipment and location, per ITEMS A8b AND A9b VENTS ARE SMART VENTS MODITEM C2e IS THE A.C. PAD.	THE STOCK OF THE PROPERTY OF T	AT 200 SQ. IN. EAC	XH.

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the correspon	ding information from S	Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, at 504 N. CLERMONT AVENUE	nd/or Bldg. No.) or P.O. F	Route and Box No.	Policy Number:
City MARGATE		IP Code 8402	Company NAIC Number
SECTION E – BUILDING E FOR ZON	LEVATION INFORMAT NE AO AND ZONE A (V		REQUIRED)
For Zones AO and A (without BFE), complete Items E complete Sections A, B,and C. For Items E1–E4, use enter meters. E1. Provide elevation information for the following an the highest adjacent grade (HAG) and the lowest a) Top of bottom floor (including basement, crawlspace, or enclosure) is b) Top of bottom floor (including basement, crawlspace, or enclosure) is E2. For Building Diagrams 6–9 with permanent flood the next higher floor (elevation C2.b in the diagrams) of the building is E3. Attached garage (top of slab) is E4. Top of platform of machinery and/or equipment servicing the building is	natural grade, if available d check the appropriate be adjacent grade (LAG). openings provided in Secondary and the secondary are appropriate by the secondary and the secondary are appropriate by t	e. Check the measure coxes to show whether feet meter tion A Items 8 and/or feet meter feet meter feet meter feet meter feet meter feet meter foor elevated in ac	ment used. In Puerto Rico only, r the elevation is above or below s
SECTION F - PROPERTY OW	/NER (OR OWNER'S RE	PRESENTATIVE) CE	ERTIFICATION 14-276
The property owner or owner's authorized representat community-issued BFE) or Zone AO must sign here. The Property Owner or Owner's Authorized Representatives	he statements in Section	ons A, B, and E for Zo s A, B, and E are cor	ne A (without a FEMA-issued or
Address	City	Sta	ate ZIP Code
Signature	346	Te	ephone
Comments			# N
			☐ Check here if attachments.

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corr			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, St. 504 N CLERMONT AVENUE	Box No.	Policy Number:	
City	State ZIP Code		Company NAIC Number
MARGATE	New Jersey 08402		
SECTIO	ON G - COMMUNITY INFORMATION (OF	PTIONAL)	
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 applicable item(
	en from other documentation that has bee ed by law to certify elevation information.		
G2. A community official completed Section or Zone AO.	on E for a building located in Zone A (with	out a FEMA	A-issued or community-issued BFE)
G3. The following information (Items G4-	G10) is provided for community floodplain	manageme	ent purposes.
G4. Permit Number	G5. Date Permit Issued		Date Certificate of Compliance/Occupancy Issued
G7. This permit has been issued for:	New Construction Substantial Improv	vement	
G8. Elevation of as-built lowest floor (including of the building:	g basement)	feet	meters Datum
G9. BFE or (in Zone AO) depth of flooding at the	he building site:	feet	meters Datum
G10. Community's design flood elevation:		feet	meters Datum
Local Official's Name JIM GALANTINO	Title CFM		
Community Name	Telephone		
CITY OF MARGATE	609-822	-1974	
Signature	Date 9/29/1	6	
Comments (including/type of equipment and loc	cation, per C2(e), if applicable)		
·			
			1
1			4
			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, co	FOR INSURANCE COMPANY USE		
Building Street Address (including 504 N. CLERMONT AVENUE	Policy Number:		
City	State	ZIP Code	Company NAIC Number
MARGATE	New Jersey	08402	200 000

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.

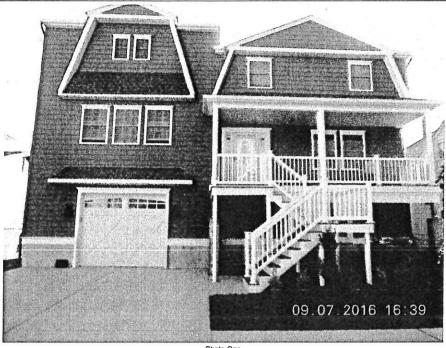


Photo One

Photo One Caption FRONT VIEW

14-276



Photo Two

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

Continuation Page

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

IMPORTANT: In these spaces, o	FOR INSURANCE COMPANY USE		
Building Street Address (including 504 N. CLERMONT AVENUE	Policy Number:		
City	State	ZIP Code	Company NAIC Number
MARGATE	New Jersey	08402	

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.

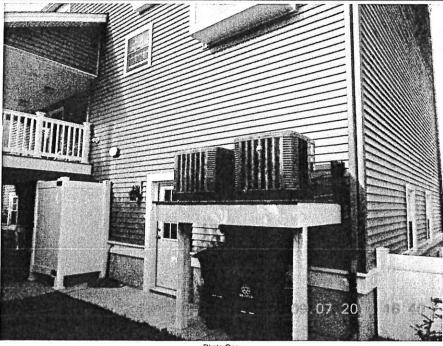


Photo One

Photo One Caption REAR VIEW AND LEFT SIDE VIEW

14-276

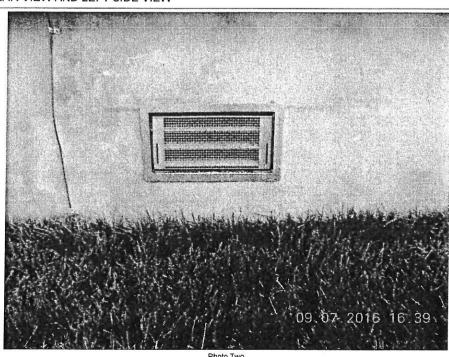
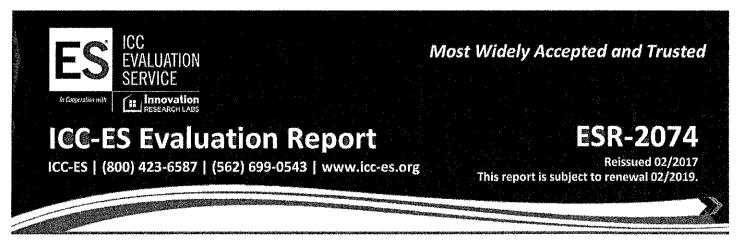


Photo Two Caption SMART VENT MODEL 1540-510 TYPICAL OF 7 TOTAL.



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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Product Cartification Body



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ICC-ES Evaluation Report

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 $400 \text{ square feet } (37.2 \text{ m}^2) \text{ of enclosed area.}$

- 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

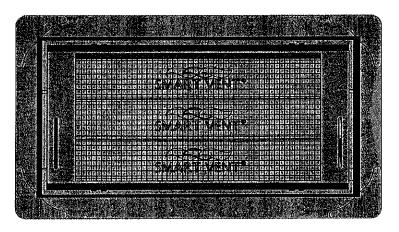


FIGURE 1—SMART VENT: MODEL 1540-510

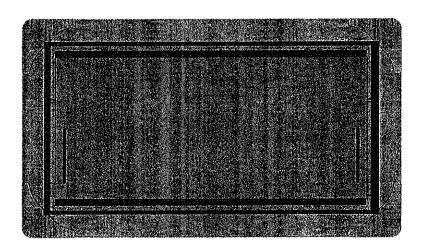


FIGURE 2-SMART VENT MODEL 1540-520

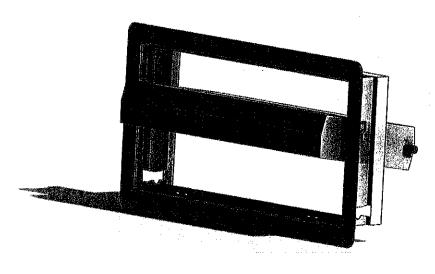


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



ICC-ES Evaluation Report

ESR-2074 CBC and CRC Supplement

Issued 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.



ICC-ES Evaluation Report

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.



Page 5 of 5