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

ON Ex	BNo. 1660-0008 pration Date: November 30	0, 201	8
	JUL 2 7 2018	U	

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.

	SEC	TION A - PROPERT	Y INFOR	MATION			FOR INSU	RANCE COMPANY USE
A1. Building Own							Policy Num	ber:
A2. Building Stree Box No. 27 N. BRUNSWIC		cluding Apt., Unit, Sui	ite, and/o	r Bldg. No.) (or P.O. Route an	d	Company N	IAIC Number:
City MARGATE				State New Je	sey	```	ZIP Code 08402	
A3. Property Desc LOT 203, BLOCK		nd Block Numbers, T	ax Parce	l Number, Le	gal Description,	etc.)	24	
A4. Building Use	(e.g., Resider	itial, Non-Residential,	Addition	, Accessory,	etc.) RESIDE	ENTIAL		
A5. Latitude/Long	itude: Lat. 3	9.33361	Long.	74.49611	Horizon	ital Datu	m: NAD	1927 × NAD 1983
A6. Attach at leas	t 2 photograp	hs of the building if th	e Certific	cate is being	used to obtain flo	ood insu	rance.	
A7. Building Diagr	am Number	7						
A8. For a building	with a crawls	pace or enclosure(s)						
a) Square for	otage of craw	space or enclosure(s)		334.70 sq ft			
b) Number of	permanent flo	ood openings in the c	rawlspac	e or enclosur	e(s) within 1.0 fc	ot abov	e adjacent gr	ade 3
c) Total net a	rea of flood o	penings in A8.b		600.00 sq i	n .			
d) Engineere	d flood openir	ngs? X Yes	No				*	
A9. For a building	with an attacl	ned garage:						
a) Square foo	tage of attach	ned garage		258.40 sq f	t			
b) Number of	permanent flo	ood openings in the a	ttached o	arage within	1.0 foot above a	adjacent	grade 2	
				400.00 so				
d) Engineered			No					
u) Engineered	т поод орегш	igs: 🔼 les 📋	INO					
	SI	CTION B - FLOOD	INSURA	NCE RATE	MAP (FIRM) IN	VFORM	ATION (7-308
B1. NFIP Commun CITY OF MARGA		Community Number 304		B2. County ATLANTIC	Name			B3. State * New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Eff	RM Panel ective/ vised Date	B8. Flood Zone(s)	B9.	Base Flood E (Zone AO, us	Elevation(s) e Base Flood Depth)
34001C0453	F	05-30-2014	05-30-		AE	9.0		
THE CONTRACTOR OF THE CONTRACT		Base Flood Elevation Community Dete						
B11. Indicate elev	ation datum	used for BFE in Item I	B9: 🗌 N	IGVD 1929		□ C	ther/Source:	
B12. Is the building	ng located in a	a Coastal Barrier Res	ources S	vstem (CBR	S) area or Otherv	wise Pro	tected Area (OPA)? ☐ Yes ☒ No
Designation	=	, , , , , , , , , , , , , , , , , , ,	CBRS		,			,
Dosignation			ODIKO					

ELEVATION CERTIFICATE

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

IMPORTANT: In these s	paces, copy the corresp	onding information	from Section A.	FOR	INSURANCE COMPANY USE
Building Street Address (27 N. BRUNSWICK AVE	including Apt., Unit, Suite NUE	and/or Bldg. No.) or	P.O. Route and Bo	ox No. Polic	y Number:
City MARGATE	lak.	State New Jersey	ZIP Code 08402	Comp	pany NAIC Number
	SECTION C - BUILDI	NG ELEVATION IN	FORMATION (SU	RVEY REQUIR	(ED)
C1. Building elevations *A new Elevation C	are based on: Con	struction Drawings* when construction of	Building Unde		
C2. Elevations – Zones Complete Items C2 Benchmark Utilized	2.a-h below according to t	he building diagram s	V (with BFE), AR, Aspecified in Item A7 al Datum: NAVD 19	. In Puerto Rico	R/A1–A30, AR/AH, AR/AO. only, enter meters.
	latum used for the elevation		-		
	929 × NAVD 1988		ii ii) below.		
	Iding elevations must be t		I for the BFE.		
					neck the measurement used.
a) Top of bottom fl	oor (including basement,	crawlspace, or enclos	sure floor)	5.68	
b) Top of the next	higher floor		- 1 -	15.36	
c) Bottom of the lo	west horizontal structural	member (V Zones on	ly)	N/A	feet meters
d) Attached garage	e (top of slab)			5.68	
e) Lowest elevation (Describe type of	n of machinery or equipment of equipment and location	ent servicing the build in Comments)	ling	14.89	⋉ feet
f) Lowest adjacen	t (finished) grade next to b	uilding (LAG)		5.30	
g) Highest adjacer	nt (finished) grade next to I	ouilding (HAG)		6.00	⊠ feet
	t grade at lowest elevation		luding	5.45	
	SECTION D - SURVI	EYOR, ENGINEER.	OR ARCHITECT	CERTIFICATION	ÓN 17-308
statement may be punis	tion on this Certificate repi hable by fine or imprisonn	resents my best effor nent under 18 U.S. C	ts to interpret the da ode, Section 1001.	ata available. I u	certify elevation information. Inderstand that any false
Were latitude and longiti	ude in Section A provided	by a licensed land su	ırveyor? ⊠Yes	∐ No ⊠	Check here if attachments.
Certifier's Name HOWARD A. TRANSUE		License Nur GS33541	nber		64 12
Title PROFESSIONAL LAND	SURVEYOR				G5 3964/ Place
Company Name SCHAEFFER NASSAR	SCHEIDEGG, CE, LLC				Seal
Address 1425 CANTILLON BOUI	LEVARD			-11	Here
City MAYS LANDING		State New Jersey	ZIP Code 08330	е	All.
Signature	1Q.C	Date 07-26-2018	Telephor (609) 62	5-7400	
Copy all pages of this Ele	vation Certificate and all at	tachments for (1) com	munity official, (2) in	surance agent/co	ompany, and (3) building owner.
	oe of equipment and locati SMART VENTS MODEL 1 PAD.				
	V = 0				

FI EVATION CERTIFICATE

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

			Expiration Bate: November 66, 2616
IMPORTANT: In these spaces, copy the correspor			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, a 27 N. BRUNSWICK AVENUE	nd/or Bldg. No.) or P.C), Route and Box No.	Policy Number:
City	State	ZIP Code	Company NAIC Number
MARGATE	New Jersey	08402	
SECTION E – BUILDING E FOR ZO	NE AO AND ZONE A		REQUIRED)
For Zones AO and A (without BFE), complete Items I complete Sections A, B,and C. For Items E1–E4, use enter meters.	natural grade, if availa	able. Check the measure	ement used. In Puerto Rico only,
 E1. Provide elevation information for the following ar the highest adjacent grade (HAG) and the lowes a) Top of bottom floor (including basement, 			r the elevation is above or below
crawlspace, or enclosure) is b) Top of bottom floor (including basement,		feet _ mete	rs above or below the HAG.
crawlspace, or enclosure) is	*****	feet mete	rs above or below the LAG.
E2. For Building Diagrams 6–9 with permanent flood the next higher floor (elevation C2.b in	openings provided in		
the diagrams) of the building is	-	feet mete	
E3. Attached garage (top of slab) is	***************************************		rs
E4. Top of platform of machinery and/or equipment servicing the building is		feet _ mete	rs above or below the HAG.
E5. Zone AO only: If no flood depth number is availa floodplain management ordinance? Yes			cordance with the community's certify this information in Section G.
SECTION F - PROPERTY O	WNER (OR OWNER'S	REPRESENTATIVE) C	ERTIFICATION 17-308
The property owner or owner's authorized representations community-issued BFE) or Zone AO must sign here.	ative who completes Se The statements in Sec	ections A, B, and E for Zo tions A, B, and E are co	one A (without a FEMA-issued or rect to the best of my knowledge.
Property Owner or Owner's Authorized Representative	/e's Name		
Address	City	St	ate ZIP Code
Signature	Date	e Te	elephone
Comments	61		
			x.
8			
1			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, S 27 N. BRUNSWICK AVENUE	uite, and/or Bldg. No.) or	P.O. Route and Box No.	Policy Number:
City MARGATE	State New Jersey	ZIP Code 08402	Company NAIC Number
SECTION	ON G - COMMUNITY IN	FORMATION (OPTIONAL)	17-308
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, er G1. The information in Section C was take	n Certificate. Complete th nter meters. sen from other documents	e applicable item(s) and sig	and sealed by a licensed surveyor
engineer, or architect who is authorized data in the Comments area below.)	ed by law to certify eleva	ation information. (Indicate t	he source and date of the elevation
G2. A community official completed Sect or Zone AO.			
G3. The following information (Items G4-	-G 10) is provided for com	imunity floodplain managen	ient purposes.
G4. Permit Number	G5. Date Permit Issue		Date Certificate of Compliance/Occupancy Issued
	7		
G7. This permit has been issued for:	New Construction S	Substantial Improvement	
G8. Elevation of as-built lowest floor (including of the building:	g basement)	fee	t meters Datum
G9. BFE or (in Zone AO) depth of flooding at	the building site:	fee	t 🗌 meters Datum
G10. Community's design flood elevation:	, 7 d ob ,	fee	t meters Datum
Local Official's Name Jin Ort	Antine	Title C FM	i fir, i i i i i i i i i i i i i i i i i i
Community Name AANG A	M	Telephone	222-1974
Signature () C	//	Date 7/27/	19
Comments (including type of equipment and loc	cation, per C2(e), if applic	cable)	
			· • • • • • • • • • • • • • • • • • • •
			18"
V			
			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 27 N. BRUNSWICK AVENUE	Policy Number:		
City	State New Jersev	ZIP Code 08402	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 AND RIGHT SIDE VIEW

17-308

Clear Photo One



Photo Two

Photo Two Caption FRONT VIEW AND LEFT SIDE VIEW

Clear Photo Two

BUILDING PHOTOGRAPHS

Continuation Page

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

ELEVATION CERTIFICATE

A STATE OF THE STA	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
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. 27 N. BRUNSWICK AVENUE						
State	ZIP Code	Company NAIC Number				
New Jersey	08402					
-	g Apt., Unit, Suite, and/or Bldg. No.) o State	g Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. State ZIP Code				

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.

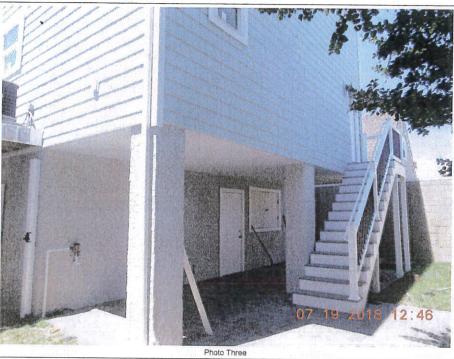


Photo Three Caption REAR VIEW

17-308

Clear Photo Three



Photo Four

Photo Four Caption SMART VENT MODEL 1540-520 TYPICAL OF 5

Clear Photo Four

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ICC-ES Evaluation Report

ESR-2074

Reissued February 2017 Revised November 2017

This report is subject to renewal February 2019.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

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:

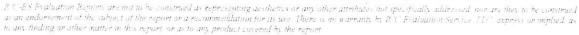
The SmartVENT® Model #1540-510 and SmartVENT® Overhead Door Model #1540-514 both have screen covers with \$1/4-inch-by-1/4-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm²) of net free area to supply natural ventilation. The SmartVENT® Stacking Model #1540-511 consists of two Model #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 SmartVENT³ 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 = m²

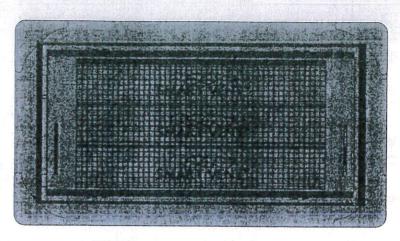


FIGURE 1-SMART VENT: MODEL 1540-510

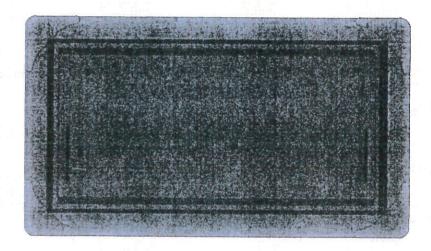


FIGURE 2—SMART VENT MODEL 1540-520

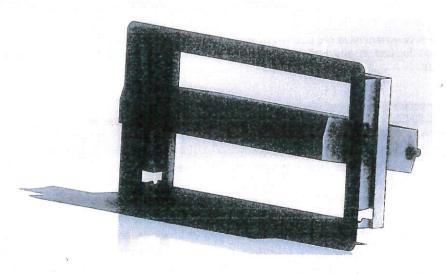


FIGURE 3-SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



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ICC-ES Evaluation Report

ESR-2074 CBC and CRC Supplement

Issued February 2017 Revised November 2017 This report is subject to renewal February 2019.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

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 and revised November 2017.







Most Widely Accepted and Trusted

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 varidation 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

