U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency

National Flood Insurance Program

appl 11/17

ELEVATION CERTIFICATE

OMB No. 1660-0008

Expiration Date: November 30, 2022

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	RMATION			FOR INSUI	RANCE COMPANY USE
A1. Building Owne				-			Policy Num	
Eric & Sharlene Ma								
Box No.	·	cluding Apt., Unit, Sui	te, and/c	or Bldg. No.) o	or P.O.	Route and	Company N	NAIC Number:
108 Atlantic Avenu	e							
City Township of O	cean (Waret	own)		State New Jer	sev		ZIP Code 08758	
		and Block Numbers, Ta	ax Parce			scription et		
Lot 6.02 - Block 21								
A4. Building Use (e.g., Reside	ntial, Non-Residential,	Addition	, Accessory,	etc.) _	Residentia	al	
A5. Latitude/Longi	tude: Lat. <u>3</u>	9-47-11	Long. 7	4-11-05		Horizonta	l Datum: 🔲 NAD	1927 × NAD 1983
A6. Attach at least	2 photograp	hs of the building if th	e Certific	cate is being i	used to	obtain floo	d insurance.	
A7. Building Diagra	am Number	7						
A8. For a building	with a crawls	space or enclosure(s):						
a) Square foo	tage of craw	lspace or enclosure(s))		1150.00	g sq ft		
b) Number of	permanent fl	ood openings in the cr	awlspac	e or enclosur	e(s) wit	- :hin 1.0 foot	: above adjacent gra	ade 6
c) Total net ar	ea of flood o	penings in A8.b		1200.00 sq ir	า			
d) Engineered	flood openir	ngs? 🗵 Yes 🗌 N	No					
A9. For a building v	vith an attacl	ned garage:						
a) Square foot	age of attach	ned garage		N/A sq ff	t			
b) Number of p	permanent fle	ood openings in the at	tached g	arage within	1.0 foot	t above adj	acent grade	NA
		penings in A9.b		a√/A sq		-		
d) Engineered			No	/*/_				
c) <u></u>		, se: [100 [1	••					
	SE	CTION B - FLOOD	INSURA	NCE RATE	MAP (FIRM) INF	ORMATION	
	•	Community Number		B2. County	Name		***	B3. State
Township of Ocear	340518			Ocean				New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Effe	RM Panel ective/	B8. F Zone		B9. Base Flood E (Zone AO, use	levation(s) e Base Flood Depth)
34029 C 0416	F	09-29-2006	09-29-2	vised Date 2006	AE		6.0	
P10 Indicate the a	ourse of the	Dana Flood Flourities	(DCC) 4			-46	i- h D0	
		Base Flood Elevation Community Deter	• •			otn enterea	In Item B9:	
					_			
B11. Indicate eleva	ition datum u	sed for BFE in Item B	9: 🔲 N	GVD 1929	× NA\	√D 1988	Other/Source:	
B12. Is the building	located in a	Coastal Barrier Reso	urces Sy	stem (CBRS) area d	or Otherwis	e Protected Area (C	PA)? ☐ Yes ⊠ No
Designation [Date:		CBRS	OPA				

ELEVATION CERTIFICATE

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the correspondent			FOR IN	ISURANC	E COMPANY USE
Building Street Address (including Apt., Unit, Suite, 108 Atlantic Avenue	and/or Bldg. No.) or P.O.	Route and Box No.	Policy I	Number:	
City	State	ZIP Code	Compa	ny NAIC I	Number
Township of Ocean (Waretown)	New Jersey	08758			
SECTION C - BUILDIN	IG ELEVATION INFOR	MATION (SURVEY R	EQUIRE	D)	
C1. Building elevations are based on: Cons *A new Elevation Certificate will be required w C2. Elevations – Zones A1–A30, AE, AH, A (with Complete Items C2.a–h below according to the Benchmark Utilized: Leica GPS Indicate elevation datum used for the elevation NGVD 1929 NAVD 1988 (C) Datum used for building elevations must be the case of the next higher floor c) Bottom of the lowest horizontal structural red) Attached garage (top of slab)	when construction of the background by the building diagram speci Vertical Dans in items a) through h) Other/Source: Le same as that used for the carawispace, or enclosure the construction of the carawispace.	th BFE), AR, AR/A, AR/ fied in Item A7. In Puert tum: <u>NAVD 88</u> below. he BFE.	Che	A1A30, A	asurement used. meters meters meters meters meters meters meters meters
e) Lowest elevation of machinery or equipme (Describe type of equipment and location if) f) Lowest adjacent (finished) grade next to be g) Highest adjacent (finished) grade next to be h) Lowest adjacent grade at lowest elevation structural support	n Comments) uilding (LAG) uilding (HAG)	g	2.8 3.5	⋉ feet⋉ feet⋉ feet⋉ feet	meters meters meters meters
	YOR, ENGINEER, OR	ARCHITECT CERTIFI	CATION	<u> </u>	
This certification is to be signed and sealed by a la I certify that the information on this Certificate representation on the certificate representation on the certificate representation of the certification of the cer	and surveyor, engineer, or esents my best efforts to ent under 18 U.S. Code,	architect authorized by interpret the data availa Section 1001.	law to co	ertify eleva derstand to	ation information. hat any false e if attachments.
Certifier's Name Russell J. Palubniak	License Number 37953				
Title Professional Land Surveyor Company Name D.P.C.S.S. Land Surveyors Address 136 Patty Lane City Manahawkin	State New Jersey	ZIP Code 08050		S	ace eal ere
Signature	Date	Telephone	Ext.		
Russell J. Palubniak Deputs young to Name J. Patrons Deputs yo	04-08-2020	(609) 276-4902	ant/on		d (2) building assess
Comments (including type of equipment and location Lowest Elevation of Machinery is the AC units local Bottom of Electric Meter is at Elevation 8.3. Proper Preliminary issue date 01-30-2015. Flood openings are Smart vent model # 1540-520 of	on, per C2(e), if applicable ted on the raised wooden ty lies in Flood Zone AE 7	e) platform on the right signal as depicted on Prelimi	de of the	house.	

ELEVATION CERTIFICATE

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the correspo	nding information	from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, a 108 Atlantic Avenue	and/or Bldg. No.) or	P.O. Route and Box No.	Policy Number:
City Township of Ocean (Waretown)	State New Jersey	ZIP Code 08758	Company NAIC Number
SECTION E – BUILDING FOR ZO	ELEVATION INFO	RMATION (SURVEY NOT E A (WITHOUT BFE)	REQUIRED)
For Zones AO and A (without BFE), complete Items complete Sections A, B,and C. For Items E1–E4, use enter meters.	E1–E5. If the Certifi	icate is intended to support a	LOMA or LOMR-F request, ment used. In Puerto Rico only,
E1. Provide elevation information for the following a the highest adjacent grade (HAG) and the lower a) Top of bottom floor (including basement,	nd check the approp st adjacent grade (L	priate boxes to show whethe AG).	r the elevation is above or below
crawlspace, or enclosure) is b) Top of bottom floor (including basement, crawlspace, or enclosure) is		feet meter	
E2. For Building Diagrams 6–9 with permanent floor	d openings provided		
the next higher floor (elevation C2.b in the diagrams) of the building is			s above or below the HAG.
E3. Attached garage (top of slab) is		feet	s above or below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is		feet meter	s above or below the HAG.
E5. Zone AO only: If no flood depth number is availa floodplain management ordinance? Yes	able, is the top of the	e bottom floor elevated in action. The local official must of	cordance with the community's certify this information in Section G.
SECTION F - PROPERTY O	WNER (OR OWNE	R'S REPRESENTATIVE) CE	RTIFICATION
The property owner or owner's authorized represents community-issued BFE) or Zone AO must sign here.	ative who completes The statements in	s Sections A, B, and E for Zo Sections A, B, and E are cor	ne A (without a FEMA-issued or rect to the best of my knowledge.
Property Owner or Owner's Authorized Representati	ve's Name		
Address	(City Sta	ate ZIP Code
Signature		Date Te	lephone
Comments			
×			
			Check here if attachments.

ELEVATION CERTIFICATE

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the corre			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, State 108 Atlantic Avenue	uite, and/or Bldg. No.) or P.	O. Route and Box No.	Policy Number:
City Township of Ocean (Waretown)	State New Jersey	ZIP Code 08758	Company NAIC Number
SECTION	ON G - COMMUNITY INFO	RMATION (OPTIONAL)	
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 a ter meters.	pplicable item(s) and sigr	below. Check the measurement
G1. The information in Section C was tak engineer, or architect who is authoriz data in the Comments area below.)	ed by law to certify elevatio	n information. (Indicate th	e source and date of the elevation
G2. A community official completed Secti or Zone AO.	on E for a building located i	n Zone A (without a FEM/	A-issued or community-issued BFE)
G3. The following information (Items G4-	G10) is provided for commo	unity floodplain managem	ent purposes.
G4. Permit Number	G5. Date Permit Issued		Date Certificate of Compliance/Occupancy Issued
G7. This permit has been issued for:] New Construction [] Sub	ostantial Improvement	
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 t	he building site:	feet	meters Datum
G10. Community's design flood elevation:		feet	meters Datum
Local Official's Name	Tit	e	
Community Name	Те	lephone	
Signature	Da	te	
Comments (including type of equipment and loc	ation, per C2(e), if applicab	le)	
	898		Check here if attachments.

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

See Instructions for Item A6.

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the c	orresponding information	from Section A.	FOR INSURANCE COMPANY USE	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 108 Atlantic Avenue			Policy Number:	
City Township of Ocean (Waretown)	State New Jersey	ZIP Code 08758	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

Clear Photo One



Photo Two Caption Right Side

Clear Photo Two

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

Continuation Page

OMB No. 1660-0008

Expiration Date: November 30, 2022

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. 108 Atlantic Avenue			FOR INSURANCE COMPANY USE Policy Number:	
Township of Ocean (Waretown)	New Jersey	08758		

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.



Photo Three

Photo Three Caption Rear View

Clear Photo Three



Photo Four

Photo Four Caption Left Side

Clear Photo Four



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ICC-ES Evaluation 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 Revised November 2017

This report is subject to renewal February 2019.

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A Subsidiary of the International Code Council®

DIVISION: 08 00 00—OPENINGS

Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMARTVENT PRODUCTS, INC. 430 ANDBRO DRIVE, UNIT 1 PITMAN, NEW JERSEY 08071 (877) 441-8368 www.smartvent.com info@smartvent.com

EVALUATION SUBJECT:

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

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2015, 2012, 2009 and 2006 International Building Code® (IBC)
- 2015, 2012, 2009 and 2006 International Residential Code[®] (IRC)
- 2013 Abu Dhabi International Building Code (ADIBC)[†]

[†]The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Physical operation
- Water flow

2.0 USES

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

3.0 DESCRIPTION

3.1 General:

When subjected to rising water, the Smart Vent[®] FVs internal floats are activated, then pivot open to allow flow in either direction to equalize water level and hydrostatic pressure from one side of the foundation to the other. The FV pivoting door is normally held in the closed position by a buoyant release device. When subjected to rising water,

the buoyant release device causes the unit to unlatch, allowing the door to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. The SmartVENT® Stacking Model #1540-511 and FloodVENT® Stacking Model #1540-521 units each contain two vertically arranged openings per unit.

3.2 Engineered Opening:

The FVs comply with the design principle noted in Section 2.7.2.2 and Section 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)] for a maximum rate of rise and fall of 5.0 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Smart Vent FVs must be installed in accordance with Section 4.0.

3.3 Ventilation:

The SmartVENT® Model #1540-510 and SmartVENT® Overhead Door Model #1540-514 both have screen covers with \$^1/4\$-inch-by-\$^1/4\$-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm²) of net free area to supply natural ventilation. The SmartVENT® Stacking Model #1540-511 consists of two Model #1540-510 units in one assembly, and provides 102 square inches (65 806 mm²) of net free area to supply natural ventilation. Other FVs recognized in this report do not offer natural ventilation.

4.0 DESIGN AND INSTALLATION

SmartVENT® and FloodVENT® are designed to be installed into walls or overhead doors of existing or new construction from the exterior side. Installation of the vents must be in accordance with the manufacturer's instructions, the applicable code and this report. Installation clips allow mounting in masonry and concrete walls of any thickness. In order to comply with the engineered opening design principle noted in Section 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)], the Smart Vent® FVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square feet (18.6 m²) of enclosed area, except that the SmartVENT® Stacking Model #1540-511 and FloodVENT® Stacking Model #1540-521 must be



installed with a minimum of one FV for every 400 square feet (37.2 m²) of enclosed area.

- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final grade or floor and finished exterior grade immediately under each opening.

5.0 CONDITIONS OF USE

The Smart Vent[®] FVs described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The Smart Vent[®] FVs must be installed in accordance with this report, the applicable code and the manufacturer's installation instructions. In the event of a conflict, the instructions in this report govern. 5.2 The Smart Vent[®] FVs must not be used in the place of "breakaway walls" in coastal high hazard areas, but are permitted for use in conjunction with breakaway walls in other areas.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015.

7.0 IDENTIFICATION

The Smart VENT® models recognized in this report must be identified by a label bearing the manufacturer's name (Smartvent Products, Inc.), the model number, and the evaluation report number (ESR-2074).

TABLE 1—MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT [®]	1540-520	$15^{3}/_{4}$ " $\times 7^{3}/_{4}$ "	200
SmartVENT [®]	1540-510	15 ³ / ₄ " X 7 ³ / ₄ "	200
FloodVENT [®] Overhead Door	1540-524	15 ³ / ₄ " X 7 ³ / ₄ "	200
SmartVENT [®] Overhead Door	1540-514	15 ³ / ₄ " X 7 ³ / ₄ "	200
Wood Wall FloodVENT®	1540-570	14" X 8 ³ / ₄ "	200
Wood Wall FloodVENT [®] Overhead Door	1540-574	14" X 8 ³ / ₄ "	200
SmartVENT [©] Stacker	1540-511	16" X 16"	400
FloodVent [®] Stacker	1540-521	16" X 16"	400

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

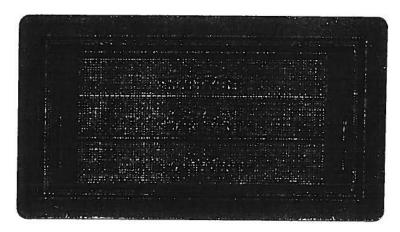


FIGURE 1-SMART VENT: MODEL 1540-510

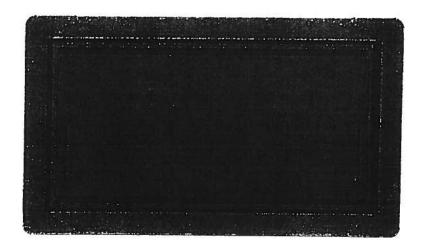


FIGURE 2—SMART VENT MODEL 1540-520

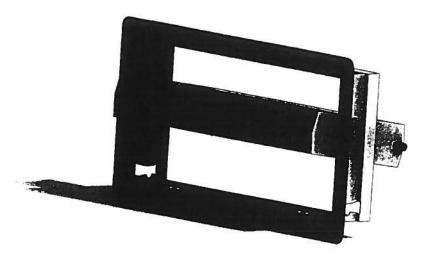


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



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 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.





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.

