# DEPARTMENT OF HOMELAND SECURITY

# Federal Emergency Management Agency ELEVATION CERTIFICATE

**IMPORTANT: FOLLOW THE INSTRUCTIONS ON PAGES 9-16** 

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

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insu	rance agent/company, and (3) building owner.
SECTION A - PROPERTY INFORMATION	FORM INSURANCE COMPANY USE
A1. Building Owner's Name Andre & Jean Butterfield	Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.	Company NAIC
1590 Harbor Cay Lane	11
City Longboat Key State FL	Zip Code 34228
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, e Property ID 0008-09-0007	ttc.)
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)Residential	
A5. Latitude/Longitude: Lat. 27 21' 19.45" . N Long. 82 36' 32.14 Horizontal Datum:	C NAD 1927 ♠ NAD 1983
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain floor	od insurance.
A7. Building Diagram Number	
A8. For a building with a crawlspace or enclosure(s):  A9. For a building with a crawlspace or enclosure(s):	lding with an attached garage:
a) Square footage of crawlspace or enclosure(s) sq ft a) Square footage	stage of attached garage NA sq
crawlspace or enclosure(s) within 1.0 foot in the attac	permanent flood openings ched garage within 1.0 foot acent grade
17,00	rea of flood openings in A9.b N/A sq i
SECTION B - FLOOD INSURANCE RATE MAP (FIRM)	
B1. NFIP Community Name & Community Number B2. County Name	B3. State
Town of Longboat Key 125126 Sarasota	FL
B4. Map/Panel Number B5. Suffix B6. FIRM Index Date B7. FIRM Panel Effective/ B1 Revised Date B.	(Zone AO use base flood
05/18/1992 08/15/1983 A	depth
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered	
FIS Profile FIRM Community Determined Other/Source:	m tem 69.
B11. Indicate elevation datum used for BFE in Item B9:	Other/Source
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwis	
Designation Date: CBRS CPA	e Protected Area (OPA)? (*Yes (*No
SECTION C - BUILDING ELEVATION INFORMATION (SUF	RVEY REQUIRED)
C1. Building elevations are based on: Construction Drawings* Building Under Cor	nstruction* (Finished Construction
C2. Elevations - Zones A1 - A30, AE, AH, A (with BFE), VE, V1 - V30, V (with BFE), AR, AR,	/A, AR/AE, AR/A1 - A30, AR/AH, AR/AO.
Complete Items C2.a -h below according to the building diagram specified in Item A7. In Puel A new Elevation Certificate will be required when construction of the building is complete.	no Rico only, enter meters.
Benchmark Utilized: FOEP MON. R-08, REF. MK1, 10.83 Vertical Datum:	NGUD 1979
Indicate elevation datum used for the elevations in items a) through h) below. ( NGVD 192	
Other/Source:	
Datum used for building elevations must be the same as that used for the BFE.	Cheek the
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	Check the measurement used
· · · · · · · · · · · · · · · · · · ·	A Cfeet C meters
c) Bottom of the lowest horizontal structural member (V Zones only)	A Cfeet Cmeters
d) Attached garage (top of slab)	1/A Cfeet Cmeters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)  A/C	- 6 feet ( meters
f) Lowest adjacent (finished) grade next to building (LAG)	- O Feet C meters
g) Highest adjacent (finished) grade next to building (HAG)	- 9 Feet C meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including	•
structural support	- & Afeet C meters
	TOWN OF

Planning, Zoning and Building

# **ELEVATION CERTIFICATE**

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

1590 Harbor Cay Lane

Longboat Key

FL

34228

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION				
This certification is to be signed and sealed by a	land surveyor, engine	er, or arc	nitect authorize	d by law to certify elevation information. I certify
that the information on this Certificate represents				
punishable by fine or imprisonment under 18 U.S				
	Were latitude and lo		Section A	
	provided by a license			2.000
Check here if attachments.			.voyor:	
	€ Yes C No			
Certifier's Name		ense Nun	nber	33,20
Robert O. Drake	59	65		3000
Title	Company Name			1 2 4 6 2 6
Project Manager	Red Stake Surveyors	s, Inc.		= 15,000
				100
Address	City	State	Zip Code	M. J. Oliver
7123 Proctor Road	Sarasota	FL	34241	130
Signature 7	Date	Teleph	one	
(/2011)	10/28/2015		41-923-99	4 190 190
Kotel Chim	10/20/20 10			- Characteria
Copy both sides of this Elevation Certificate for (	1) community official	(2) incura	nce agent/com	nany and (3) building owner
The second secon			ice agenircom	party, and (3) building owner.
Comments (including type of equipment and loc	ation , per C2(e), if ap	plicable)"		
1				- 14
AIR CONDITIONER ON	NORTH SI	DEO	FBUIL	DING.
				¥
2010	1			
Signature Signature	-/			Data . alanl.e
1000000	<u> </u>			Date 10/28/15
SECTION E - BUILDING ELEVATION INFO				
For Zones AO and A (without BFE), complete Ite				
Sections A, B,and C. For Items E1 -E4, use natu	ral grade, if available.	Check the	e measuremen	t used. In Puerto Rico only, enter meters.
E1. Provide elevation information for the following			es to show wh	ether the elevation is above or below the
highest adjacent grade (HAG) and the lowes	t adjacent grade (LAG	6).		
- T				
a) Top of bottom floor (including basement,	crawispace,	-	( feet (	meters above or below the HAG.
or enclosure) is				
b) Top of bottom floor (including basement,	rawlenaca			
or enclosure) is	Jawispace,	-	C feet C	meters above or below the LAG.
E2. For Building Diagrams 6 -9 with permanent f	lood openings provide	d in Secti	on A Items 8 ar	nd/or 9 (see pages 8 -9 of Instructions), the next
higher floor (elevation C2.b in the diagrams) of the	ne building is	-	C feet	C meters above or below the HAG.
E3. Attached garage (top of slab) is		-	C feet C	meters above or below the HAG.
E4. Top of plotform of machines, and for anything			-	
E4. Top of platform of machinery and /or equipm	ent	-	C feet C	meters
servicing the building is	***************************************	-	. , 1001 (	meters above or below the HAG.
E5. Zone AO only: If no flood depth number is av	ailable, is the top of th	ne bottom	floor elevated i	n accordance with the community's floodplain
- ( Tes ( NO (	Unknown. The local of	Jilicial Mu	st certify this in	formation in Section G.
SECTION F - PROPE	RTY OWNER (OR OW	NER'S R	EPRESENTAT	IVE) CERTIFICATION
The property owner or owner's authorized repres				
community-issued BFE) or Zone AO must sign h				
Property Owner or Owner's Authorized Represe			, _, u	The state of the s
	madve a Hallie.			
Address	City		State	ZIP Code
Signature	Date		Telephor	ne
			, ciopiloi	
Comments				
Comments				
				İ

Check here if attachments.

# DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency
ELEVATION CERTIFICATE
IMPORTANT: FOLLOW THE INSTRUCTIONS ON PAGES 9-16

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

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insura	
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A1. Building Owner's Name Andre & Jean Butterfield	Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.  1590 Harbor Cay Lane	Company NAIC Number:
City Longboat Key State FL	Zip Code 34228
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc. Property ID 0008-09-0007	)
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)Residential	
A5. Latitude/Longitude: Lat. 27 21' 19.45" N Long. 82 36' 32.14 Horizontal Datum:	NAD 1927
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood	insurance.
A7. Building Diagram Number	
A8. For a building with a crawlspace or enclosure(s):  A9. For a buildi	ng with an attached garage:
a) Square footage of crawlspace or enclosure(s) sq ft a) Square foota	ge of attached garage sq ft
	ermanent flood openings ed garage within 1.0 foot ent grade
c) Total net area of flood openings in A8.b sq in c) Total net area	a of flood openings in A9.b sq in
d) Engineered flood openings? (Yes (No d) Engineered f	lood openings? C Yes C No
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) IN	
B1. NFIP Community Name & Community Number B2. County Name Sarasota	B3. State FL
B4. Map/Panel Number B5. Suffix B6. FIRM Index Date B7. FIRM Panel Effective/ B8.	Flood Zone(s) B9. Base Flood Elevation(s)
125126 0010 B Revised Date 05/18/1992 08/15/1983 A13	(Zone AO use base flood
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in	
← FIS Profile ← FIRM ← Community Determined ← Other/Source:	
B11. Indicate elevation datum used for BFE in Item B9:    NGVD 1929  NAVD 1988  C	Other/Source:
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise I	Protected Area (OPA)? Yes No
Designation Date: CBRS COPA	
SECTION C - BUILDING ELEVATION INFORMATION (SURV	
C1. Building elevations are based on: Construction Drawings* Building Under Const	
C2. Elevations - Zones A1 - A30, AE, AH, A (with BFE), VE, V1 - V30, V (with BFE), AR, AR/A Complete Items C2.a -h below according to the building diagram specified in Item A7. In Puerto	
A new Elevation Certificate will be required when construction of the building is complete.	
Benchmark Utilized: Vertical Datum:	
Indicate elevation datum used for the elevations in items a) through h) below.    NGVD 1929	C NAVD 1988
Other/Source:	
Datum used for building elevations must be the same as that used for the BFE.	Check the measurement used.
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	C feet C meters
b) Top of the next higher floor	C feet C meters
c) Bottom of the lowest horizontal structural member (V Zones only)	Cfeet C meters
Attached garage (top of slab)     Lowest elevation of machinery or equipment servicing the building	C feet C meters
(Describe type of equipment and location in Comments)	C feet C meters
f) Lowest adjacent (finished) grade next to building (LAG)	C feet C meters
g) Highest adjacent (finished) grade next to building (HAG)	C feet C meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	Cfeet Cmeters 1
	TOWN OF LO
	Charles Zan

# **ELEVATION CERTIFICATE**

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

1590 Harbor Cay Lane

Longboat Key

FL

34228

SECTION D -	SURVEYOR, ENGI	NEER, OR A	RCHITECT CE	RTIFICATION
This certification is to be signed and sealed by	a land surveyor, eng	ineer, or arch	nitect authorized	by law to certify elevation information. I certify
that the information on this Certificate represent	nts my best efforts to	interpret the	data available. I	l understand that any false statement may be
punishable by fine or imprisonment under 18 U	I.S. Code, Section 10	001.		
	Were latitude and	longitude in	Section A	1
Check here if attachments.	provided by a lice			
		No		
Certifier's Name		License Num	her	7
Robert O. Drake		5965		
	- ·			PR200_\$_
Title	Company Name Red Stake Survey	rore Inc		Ne d
Project Manager	ined Stake Survey	rors, mc.		<b>月五秋</b> 春
Address	City	State	Zip Code	]
7123 Proctor Road	Sarasota	FL	34241	
Signature	Date	Teleph	one	1
olginaturo .	10/28/2015		41-923-99	
	10/20/2013		41-823-88	
Copy both sides of this Elevation Certificate for	(1) community offici	al (2) insura	nce agent/comp	any and (3) building owner
			ice ageniccomp	arry, and (5) building owner.
Comments (including type of equipment and lo	cation, per C2(e), if	applicable)"		
				•
i				
Singer to the same of the same				
Signature				Date
				ZONE AO AND ZONE A (WITHOUT BFE)
For Zones AO and A (without BFE), complete It				
Sections A, B,and C. For Items E1 -E4, use nat	tural grade, if availab	ole. Check the	measurement	used. In Puerto Rico only, enter meters.
E1. Provide elevation information for the followi	ing and check the an	nronriate ho	res to show whe	ther the elevation is above or below the
highest adjacent grade (HAG) and the lowe			ies to show whe	ther the elevation is above of below the
Ingition adjustiting facts (1910) and the letter	ot dajacom grado (E			
a) Top of bottom floor (including basement,	crawlspace,		Chat C	meters above or below the HAG.
or enclosure) is			feet (	meters above or below the HAG.
b) Top of bottom floor (including basement,	crawispace,		C feet C m	neters above or below the LAG.
or enclosure) is	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		-	-
E2. For Building Diagrams 6 -9 with permanent	flood openings prov	ided in Section	on A Items 8 and	d/or 9 (see pages 8 -9 of Instructions), the next
higher floor (elevation C2.b in the diagrams) of		-	( feet (	meters above or below the HAG.
E3. Attached garage (top of slab) is			C feet C m	neters above or below the HAG.
E4. Top of platform of machinery and /or equipr	ment			
servicing the building is		-	C feet C m	neters above or below the HAG.
E5. Zone AO only: If no flood depth number is a				
management ordinance? (Yes (No (	Unknown. The loc	al official mus	at certify this info	ormation in Section G.
SECTION F - PROPE				
The property owner or owner's authorized repre community-issued BFE) or Zone AO must sign	berntative who comp	e in Sections	SA, B, and E to	r Zone A (without a FEMA-issued or
Property Owner or Owner's Authorized Represe		s in Sections	A, b, and E are	correct to the best of my knowledge.
Property Owner of Owner's Authorized Represe	entative's Name:			
Address	City		State	ZIP Code
And the state of t	•			5525
Signature	Date		Telephone	<u> </u>
	7,711		,	
Comments				
Comments				
				i.
				i
				Check here if attachments.
				oneon nere il attacriments.

# Building Photographs See Instructions for Item A6.

			For Insurance Company Use:
Building Street Address (inclu	ding Apt., Unit, Suite, and/or Bldg. No.) or P.O.	. Route and Box No.	Policy Number
1590 Harbor Cay			
City	State	ZIP Code	Company NAIC Number
Longboat Key	FL	34228	

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two 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." If submitting more photographs than will fit on this page, use the Continuation Page, following.



Front View

Rear View

MAY 19 2017

TOWN OF LONGBOAT KEY ilding



# **ICC-ES Evaluation Report**

ESR-2074\*

Reissued February 2015

This report is subject to renewal February 2017.

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:

- 2012, 2009 and 2006 International Building Code® (IBC)
- 2013 Abu Dhabi International Building Code (ADiBC)<sup>1</sup>

<sup>1</sup>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 2.6.2.2 of ASCE/SEI 24 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. The mounting straps allow mounting in masonry and concrete walls up to 12 inches (305 mm) thick. In order to comply with the engineered opening design principle noted in Section 2.6.2.2 of ASCE/SEI 24, 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

\*Revised July 2015



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<sup>®</sup> 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<sup>®</sup> 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 October 2013 (editorially revised May 2014).

#### 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 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT®	1540-510	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
FloodVENT® Overhead Door	1540-524	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Overhead Door	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 <sup>3</sup> / <sub>4</sub> "	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

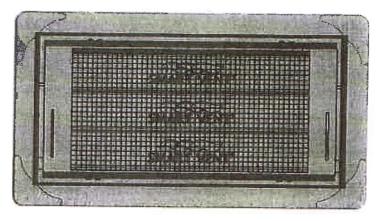


FIGURE 1-SMART VENT: MODEL 1540-510

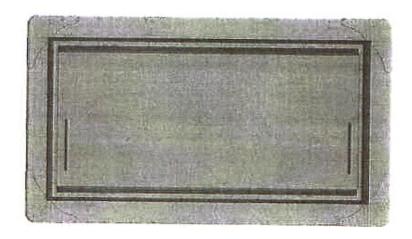


FIGURE 2—SMART VENT MODEL 1540-520

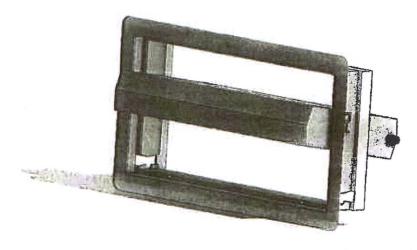


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN





# **ICC-ES Evaluation Report**

# ESR-2074 FBC Supplement\*

Reissued February 2015

This report is subject to renewal February 2017.

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 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 2015 and revised July 2015.

\*Revised July 2015

