## U.S. DEPARTMENT OF HOMELAND SECURITY

### **ELEVATION CERTIFICATE**

OMB No. 1660-0008 Expires March 31, 2012

Federal Emergency Management Agency

Natio	nal Flood Insurance Program		Important	: Read the	instructions o	n pa	iges 1-9.		
				TION A - PR	OPERTY INFO	RMA	ATION		nce Company Use:
	Building Owner's Name Fra	nk & Janice	e Cook					Policy Num	iber
	Building Street Address (inc Putter Lane	luding Apt.,	Unit, Suite, and/or	Bldg. No.) or F	.O. Route and B	ox No	D.	Company I	NAIC Number
	City Longboat Key Sta	te FL ZIF	Code 34228						
	Property Description (Lot an I, Country Club Shores, Unit				Description, etc.	)			
	Building Use (e.g., Resident								
	Latitude/Longitude: Lat. 27.3 Attach at least 2 photograph								
	Building Diagram Number 1		iding ii the Certifica	te is being use	u to obtain flood	ınsura	ance.		
	For a building with a crawlsp				A9. Fo	r a bi	uilding with an attac	ched garage:	
	Square footage of crawls			N/A sq ft			are footage of atta		<u>554</u> sq ft
	<li>No. of permanent flood of enclosure(s) within 1.0 for</li>	penings in not above a	the crawispace or diacent grade	N/A	b)		of permanent flood in 1.0 foot above a		he attached garage
	c) Total net area of flood op			N/A sq ir	c)		al net area of flood		3 9.b <u>600</u> sqin
	d) Engineered flood opening	gs? [	Yes 🛭 No				ineered flood open		Yes No
		SECT	ION B - FLOOD	INSURANCE	RATE MAP (	FIRM	I) INFORMATIO	V	
	NFIP Community Name & Co boat Key, Sarasota Co. 1251		umber	B2. County N sarasota	ame			B3. State FL	
			DO FIDMAL I						
D4.	0010	5. Suffix B	B6. FIRM Index Date 5/18/1992	Effecti	. FIRM Panel ve/Revised Date 8/15/1983	S.)	B8. Flood Zone(s) A13		Flood Elevation(s) (Zone se base flood depth)
310.	ndicate the source of the Ba	se Flood El	evation (BFF) data	or base flood	lenth entered in	ltem [	Section 1997		
	☐ FIS Profile        F		☐ Community Dete		Other (Desc				
311.	ndicate elevation datum use				☐ NAVD 1988		Other (Describe	<u>.</u> )	
	s the building located in a Co					rotec	ted Area (OPA)?	"—— <sub>— Y</sub>	es 🛛 No
	Designation Date			☐ CBRS	☐ OPA		• • • • • • • • • • • • • • • • • • •	_	
$\sim$		SECTION	LC BUILDING	-1 F)/A TION					
			C - BUILDING		INFORMATIO	N (St	JRVEY REQUIR	ED)	
71. Bi	uilding elevations are based	on: [	Construction Dra	awings*	☐ Building U	nder (	Construction*		Construction
2. EI	new Elevation Certificate wi evations – Zones A1-A30, Al	FAHA(w	ith RFF) VF V1-V	n of the buildin	g is complete.	/AE	AD/A1 A20 AD/AL	L AD/AC	
be	elow according to the building	diagram s	pecified in Item A7.	Use the same	datum as the B	FE.	AIVA1-A30, AIVAI	i, ARVAO. Cor	npiete items C2.a-n
	enchmark Utilized DEP Z 68	39Vertical D	atum 6.47 NGVD	1929					
Co	onversion/Comments N/A								
۵)	Tan of hollow Book Co. 1						neck the measurem		
a) b)	Top of bottom floor (include Top of the next higher floor		ent, crawlspace, or	enclosure flooi			meters (Puert		
c)	Bottom of the lowest horiz		ural member // Zo	acc only)			meters (Puerto		
d)	Attached garage (top of sl		diai illeffiber (V 201	les offiy)			meters (Puerto	100	
e)	Lowest elevation of machi	nery or equ	ipment servicing th	e buildina			meters (Puerto		
	(Describe type of equipme	ent and loca	tion in Comments)	3		1000	Incicio (i della	o raco omy)	
f)	Lowest adjacent (finished)						meters (Puerto		
g)	Highest adjacent (finished						meters (Puerto		
h)	Lowest adjacent grade at structural support	lowest elev	ation of deck or stai	rs, including	<u>8.50</u> ⊠	feet	meters (Puerto	Rico only)	
		SECTION	N D - SURVEYOR	R, ENGINEEI	R, OR ARCHIT	ECT	CERTIFICATION	N	
This c inform	ertification is to be signed an ation. I certify that the inform	d sealed by	a land surveyor, e	ngineer, or arc	hitect authorized	by la	w to certify elevation	on	
under	stand that any faise statemer	nt may be p	unishable by fine o	r imprisonment	under 18 U.S. C	ode,	Section 1001.	11/2	.,
Ci	neck here if comments are pr	ovided on I	back of form.	Were latitude a	and longitude in S	Sectio	on A provided by a	14 4	ER.
		3- 3		licensed land s	urveyor?	Yes	□ No	71:3	PLACE
Certific	er's Name John C. Minder, P	.E., P.S.M.	=		License Number	er 40	71 /	三人	STALL TO
F	Professional Surveyor & Map	per (	Company Name M	linder & Assoc	ates Engineering	Corp	poration	Flool	KAN Jaco
Addres	ss P.O. Box 18837	- (	City Sarasota		State FL	- 7	ZIP Code 34276	- 30	7-24-12
Signat	ure Alwall	rechi	Date 07	7/24/2012	Telephone 94	1-926	3-2700	+ 1/2.	···

IMPORTANT: In these spaces,	copy the corresponding information from	Section A.	For Insurance Company Use:
	t., Unit, Suite, and/or Bldg. No.) or P.O. Route and		Policy Number
City Longboat KeyState FL ZIP Cod	de 34228		Company NAIC Number
SECTION	D - SURVEYOR, ENGINEER, OR ARCHIT	ECT CERTIFICATION (CO	NTINUED
	ificate for (1) community official, (2) insurance age		
Comments C2e A/C pad on southe		nvcompany, and (3) building of	wner.
Signature Signature	12 De	07/4/2012	
// 20 2	C: EE		☐ Check here if attachmen
SECTION E - BUILDING ELE	VATION INFORMATION (SURVEY NOT RE	QUIRED) FOR ZONE AO	AND ZONE A (WITHOUT BFE)
<ul> <li>E1. Provide elevation information for grade (HAG) and the lowest adjaa) Top of bottom floor (including b) Top of bottom floor (including b) Top of bottom floor (including clevation C2.b in the diagrams)</li> <li>E3. Attached garage (top of slab) is</li> <li>E4. Top of platform of machinery and</li> <li>E5. Zone AO only: If no flood depth</li> </ul>	basement, crawlspace, or enclosure) isbasement, crawlspace, or enclosure) isbermanent flood openings provided in Section A Ite of the building is feet me	In Puerto Rico only, enter me show whether the elevation is a feet meters feet meters ems 8 and/or 9 (see pages 8-9 ters above or below the or below the feet meters above or delevated in accordance with the	ters.  above or below the highest adjacent  above or below the HAG.  above or below the LAG.  of Instructions), the next higher floor e HAG.
	F - PROPERTY OWNER (OR OWNER'S R		FICATION
The property owner or owner's authorized or Zone AO must sign here. The state.	ted representative who completes Sections A, B, aments in Sections A, B, and E are correct to the be	and F for Zone A (without a FEI	
Property Owner's or Owner's Authorize	d Representative's Name		
ess	City	State	ZIP Code
Signature	Date	Telepho	
Comments			
		-	
			Check here if attachme
	SECTION G - COMMUNITY INFORMA	ATION (OPTIONAL)	
	or ordinance to administer the community's flood plete the applicable item(s) and sign below. Check	plain management ordinance c	is G8 and G9
2. A community official completed	as taken from other documentation that has been levation information. (Indicate the source and date Section E for a building located in Zone A (withou	e of the elevation data in the Control of the Contr	mmente area bolow \
G4. Permit Number	s G4-G9) is provided for community floodplain ma	nagement purposes.	
54. Femili Number	G5. Date Permit Issued	G6. Date Certificate Of Comp	liance/Occupancy Issued
7. This permit has been issued for:  8. Elevation of as-built lowest floor (inc.)  9. BFE or (in Zone AO) depth of flooding flood elevation.	ng at the building site:	ovement    feet   meters (PR) Datum   feet   meters (PR) Datum   feet   meters (PR) Datum	
ocal Official's Name	Title		
Community Name	Telep	hone	
ignature	Date		
nents			
		***	_
			Check here if attachments

## Building Photographs See Instructions for Item A6.

	For Insurance Company Use:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 570 Putter Lane	Policy Number
City Longboat Key State FL ZIP Code 34228	Company NAIC Number

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.



## Building Photographs Continuation Page

	For Insurance Company Use:
Puilding Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 0 Putter Lane	Policy Number
City Longboat Key State FL ZIP Code 34228	Company NAIC Number

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."



**REAR VIEW** 

## Building Photographs See Instructions for Item A6.

	For Insurance Company Use:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 570 Putter Lane	Policy Number
City Longboat Key State FL ZIP Code 34228	Company NAIC Number

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.



# Building Photographs Continuation Page

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

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."



**REAR VIEW** 



### **ICC-ES Evaluation Report**

ESR-2074\*

Reissued February 2015

This report is subject to renewal February 2017.

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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:

- 2012, 2009 and 2006 International Building Code® (IBC)
- 2012, 2009 and 2006 International Residential Code® (IRC)
- 2013 Abu Dhabi International Building Code (ADIBC)<sup>T</sup>

<sup>†</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  $\frac{1}{4}$ -inch-by- $\frac{1}{4}$ -inch (6.35 by 6.35 mm) openings. yielding 51 square inches (32 903 mm<sup>2</sup>) 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 mm<sup>2</sup>) 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 FloodVENT® Stacking Model #1540-521 must be installed with a minimum of one FV for every 400 square feet (37.2 m<sup>2</sup>) 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<sup>®</sup> 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 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 = m<sup>2</sup>

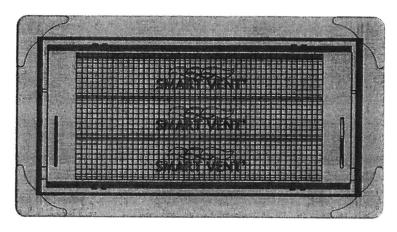


FIGURE 1-SMART VENT: MODEL 1540-510

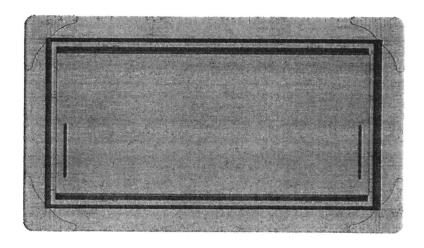


FIGURE 2—SMART VENT MODEL 1540-520

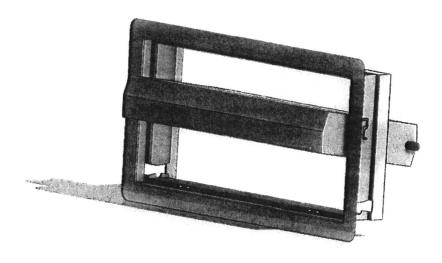


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



### **ICC-ES Evaluation Report**

### ESR-2074 FBC Supplement\*

Reissued February 2015

This report is subject to renewal February 2017.

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#### 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

