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

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

# **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.

					FOR INSU	RANCE COMPANY USE	
A1. Building Owner's Name LAIRD BOULDEN						Policy Num	ber:
A2. Building Street Box No. 4225 HIGEL AVE	Address (inc	luding Apt., Unit, Suite	, and/o	or Bldg. No.) or P.O.	Route and	Company N	NAIC Number:
City SARASOTA				State Florida		ZIP Code 34242	
	•	nd Block Numbers, Tax NUT BAYOU, PID#007		•	scription, etc.)	· · · · · ·	
A4. Building Use (	e.g., Resident	tial, Non-Residential, A	dditior	, Accessory, etc.)	RESIDENTIAL		
A5. Latitude/Longit	ude: Lat. 27	°17'25.83"N	Long. 8	2°33'30.74"W	Horizontal Datun	n: NAD	1927 × NAD 1983
A6. Attach at least	2 photograph	ns of the building if the	Certific	cate is being used to	o obtain flood insura	ance.	
A7. Building Diagra	ım Number	6					
A8. For a building v	with a crawls	pace or enclosure(s):					
a) Square foot	age of crawls	space or enclosure(s)		588 sq ft			
b) Number of p	permanent flo	od openings in the cra	wispac	e or enclosure(s) w	ithin 1.0 foot above	adjacent gr	ade 6
c) Total net are	ea of flood op	enings in A8.b 76	8 \$	sq in			
d) Engineered	flood opening	gs? ⊠ Yes □ No					
A9. For a building v	vith an attach	ed garage:					
_				sg ft			
	_	od openings in the atta		•	ot above adjacent o	ırade	0
					ot above adjacent g		<u> </u>
c) Total net are		-	0	sq in			
d) Engineered	noog opening	gs? ☐ Yes ⊠ N	0				
	SE	CTION B - FLOOD IN	ISUR/	NCE RATE MAP	(FIRM) INFORMA	TION	
B1. NFIP Communi	-	ommunity Number		B2. County Name			B3. State
SARASOTA COUNTY, 125144 SARASOTA Florida							
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	E	IRM Panel ffective/	B8. Flood Zone(s)	(Zo	se Flood Elevation(s) ne AO, use Base
12115C0141	F	11/04/2016		evised Date 3/2016	AE	10	od Depth)
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:							
☐ FIS Profile	⊠ FIRM	Community Determ	ined [	Other/Source:		<del> </del>	
B11. Indicate eleva	tion datum u	sed for BFE in Item B9	: 🔲 N	GVD 1929 🔀 NA	.VD 1988 ☐ Oti	ner/Source:	
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? 🔲 Yes 🗵 No							
Designation Date: CBRS CPA							

# **ELEVATION CERTIFICATE**

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IMPORTANT: In these spaces, copy the corresponding in	formation from Sec	ction A.	EOD INCLIDANCE COMPANY LICE
	FOR INSURANCE COMPANY USE		
Building Street Address (including Apt., Unit, Suite, and/or Black 4225 HIGEL AVE	dg. No.) or P.O. Rou	ite and Box No.	Policy Number:
City State		Code	Company NAIC Number
SARASOTA Florida	a 342	42	
SECTION C - BUILDING ELEV	ATION INFORMAT	TION (SURVEY	REQUIRED)
C1. Building elevations are based on: Construction I  *A new Elevation Certificate will be required when cons	Orawings*	=	truction* X Finished Construction
C2. Elevations - Zones A1-A30, AE, AH, A (with BFE), VE Complete Items C2.a-h below according to the building			
Benchmark Utilized: NGS R 79	Vertical Datum:	NAVD 1988	•
Indicate elevation datum used for the elevations in item	 ns a) through h) belo	w.	
☐ NGVD 1929 区 NAVD 1988 ☐ Other/Sou			
Datum used for building elevations must be the same a		BFE.	
•			Check the measurement used.
a) Top of bottom floor (including basement, crawlspace)	e, or enclosure floor)	6. <u>9</u>	X feet  meters
b) Top of the next higher floor		17, 9	X feet  meters
c) Bottom of the lowest horizontal structural member (\	/ Zones only)	N/A	
	v Zones only)	N/A	X feet  meters
d) Attached garage (top of slab)		N/A.	
e) Lowest elevation of machinery or equipment servicing (Describe type of equipment and location in Comme	ng the building ents)	11.3	X feet  meters
f) Lowest adjacent (finished) grade next to building (L/	AG)	<u>5</u> . <u>8</u>	X feet  meters
g) Highest adjacent (finished) grade next to building (H	IAG)	10.5	X feet  meters
h) Lowest adjacent grade at lowest elevation of deck o structural support	or stairs, including	N/A	X feet  meters
SECTION D SURVEYOR, EN	IGINEED OD ADO	PUITECT CEDTI	EICATION
			<del></del>
This certification is to be signed and sealed by a land survey I certify that the information on this Certificate represents my statement may be punishable by fine or imprisonment under	yor, engineer, or arc y best efforts to inter r 18 U.S. Code, Sec	hitect authorized i pret the data avai tion 1001.	by law to certify elevation information. Ilable. I understand that any false
Were latitude and longitude in Section A provided by a licen		⊠Yes □ No	Check here if attachments.
	icense Number SM 6822		make all
Title OWNER			Si Company
Company Name			
BRIGHAM/ALLEN LAND SURVEYING			
Address 807 US HIGHWAY 41 BYPASS SOUTH, SUITE A			
	State Florida	ZIP Code 34285	$m_{m_{m_n}}$
	Date 04/24/2017	Telephone (941) 493-4430	
Copy all pages of this Elevation Certificate and all attachments	for (1) community of	ficial, (2) insurance	e agent/company, and (3) building owner.
Comments (including type of equipment and location, per C2 A5 SOURCE OF LAT/LONG IS HAND HELD GPS USING A NORTH SIDE OF HOUSE.		P (GPS TEST). C	2(e) AC IS LOCATED ON THE

# **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corresponding info	rmation from Sec	tion A.	FOR INSURAN	CE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg 4225 HIGEL AVE	. No.) or P.O. Rou	te and Box No.	Policy Number:	
City State SARASOTA Florida	ZIP (	Code 12	Company NAIC	Number
SECTION E – BUILDING ELEVATION FOR ZONE AO AI			REQUIRED)	
For Zones AO and A (without BFE), complete Items E1–E5. If to complete Sections A, B, and C. For Items E1–E4, use natural grenter meters.	rade, if available. (	Check the measure	ment used. In Pu	erto Rico only,
E1. Provide elevation information for the following and check the highest adjacent grade (HAG) and the lowest adjacent a) Top of bottom floor (including basement,		es to show whethe	r the elevation is	above or below
crawlspace, or enclosure) is b) Top of bottom floor (including basement,		☐ feet ☐ meter	rs 🔲 above or	below the HAG.
crawlspace, or enclosure) is		feet meter		below the LAG.
E2. For Building Diagrams 6–9 with permanent flood openings the next higher floor (elevation C2.b in the diagrams) of the building is	provided in Sectio	on A items 8 and/or ☐ feet ☐ meter		below the HAG.
E3. Attached garage (top of slab) is		☐ feet ☐ meter	_	below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is		☐ feet ☐ meter	rs 🔲 above or	below the HAG.
E5. Zone AO only: If no flood depth number is available, is the floodplain management ordinance?  Yes No	top of the bottom t	floor elevated in ac local official must o	cordance with the certify this inform	e community's ation in Section G.
SECTION F PROPERTY OWNER (OF	ROWNER'S REPR	RESENTATIVE) CE	RTIFICATION	
The property owner or owner's authorized representative who community-issued BFE) or Zone AO must sign here. The stater	ompletes Sections nents in Sections /	A, B, and E for Zo A, B, and E are con	ne A (without a F	EMA-issued or f my knowledge.
Property Owner or Owner's Authorized Representative's Name			•	
Address	City	Sta	ate	ZIP Code
Signature	Date	Те	lephone	
Comments				
			☐ Check h	ere if attachments.

# **ELEVATION CERTIFICATE**

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

IMPORTANT: in these spaces, copy the corre	sponding information	n from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Su 4225 HIGEL AVE	ite, and/or Bldg. No.) o	r P.O. Route and Box No	. Policy Number:
City SARASOTA	State Florida	ZIP Code 34242	Company NAIC Number
SECTIO	N G - COMMUNITY IN	IFORMATION (OPTIONA	AL)
The local official who is authorized by law or ord Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, ent	Certificate. Complete ti er meters.	ne applicable item(s) and	sign below. Check the measurement
engineer, or architect who is authorized data in the Comments area below.)	ed by law to certify elev	ation information. (Indicat	te the source and date of the elevation  EMA-issued or community-issued BFE)
or Zone AO.	on E for a building local	ed in Zone A (without a F	EMA-Issued of community-issued BFE)
G3. The following information (Items G4-C	G10) is provided for cor	mmunity floodplain manag	gement purposes.
G4. Permit Number	G5. Date Permit Issue	ed G	Date Certificate of     Compliance/Occupancy Issued
G7. This permit has been issued for:	New Construction	Substantial Improvement	<b>!</b>
G8. Elevation of as-built lowest floor (including of the building:	basement)	□	feet  meters Datum
G9. BFE or (in Zone AO) depth of flooding at the	ne building site:		feet meters
G10. Community's design flood elevation:		□	feet  meters Datum
Local Official's Name		Title	
Community Name		Telephone	
Signature		Date	
Comments (including type of equipment and local	ation, per C2(e), if appl	icable)	
			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, c	FOR INSURANCE COMPANY USE Policy Number:		
Building Street Address (including 4225 HIGEL AVE			
City	State	ZIP Code	Company NAIC Number
SARASOTA	Florida	34242	

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 4/24/17



Photo Two

Photo Two Caption FRONT 4/24/17

# **BUILDING PHOTOGRAPHS**

# **ELEVATION CERTIFICATE**

**Continuation Page** 

OMB No. 1660-0008

Expiration Date: November 30, 2018

IMPORTANT: In these spaces, cop	y the corresponding information	on from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including A 4225 HIGEL AVE	pt., Unit, Suite, and/or Bldg. No.)	or P.O. Route and Box No.	Policy Number:
City SARASOTA	State Florida	ZIP Code 34242	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." 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 4/24/17

**Photo Two** 

Photo Two

**Photo Two Caption** 



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**ESR-2074** 

Reissued 02/2015 This report is subject to renewal 02/2017.

**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 2015

This report is subject to renewal February 2017.

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**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>†</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<sup>®</sup> 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<sup>®</sup> 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® 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 =  $m^2$ 

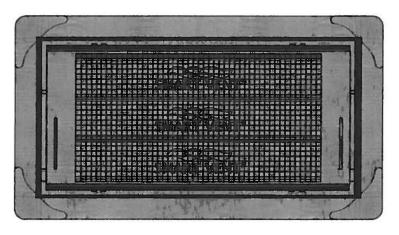


FIGURE 1—SMART VENT: MODEL 1540-510

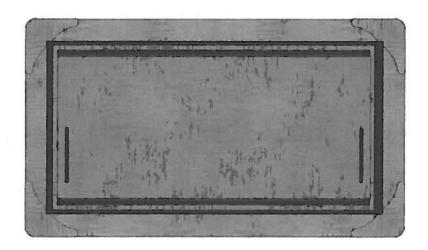


FIGURE 2—SMART VENT MODEL 1540-520

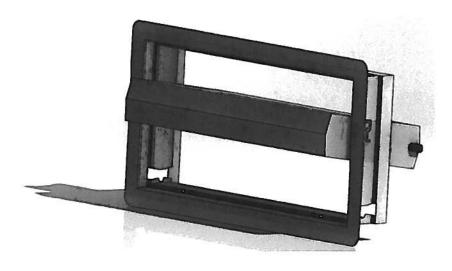


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



# ICC-ES Evaluation Report

# ESR-2074 FBC Supplement\*

Reissued February 2015

This report is subject to renewal February 2017.

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**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