# 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.

SECTION A – PROPERTY INFORMAT	TION	FCR INSURANCE COMPANY USE	
A1. Building Owner's Name BEACH TO BAY INVESTMENTS	Po cy Number:		
<ul> <li>A2. Building Street Address (including Apt., Unit, Suite, and/or Bld Box No.</li> <li>3470 GULF OF MEXICO DR</li> </ul>	Company NAIC Number:		
LONGBOAT KEY	State Florida	ZIP Code 34228	
A3. Property Description (Lot and Block Numbers, Tax Parcel Num UNIT C OF THE ENCLAVE AT LONGBOAT KEY,	nber, Legal Description, etc.)		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Acc	cessory, etc.) RESIDENTIAL		
A5. Latitude/Longitude: Lat. 27.378521 Long82.63	34473 Horizontal Datur	n: NAD 1927 X NAD 1983	
A6. Attach at least 2 photographs of the building if the Certificate is	s being used to obtain flood insur	ance.	
A7. Building Diagram Number7			
A8. For a building with a crawlspace or enclosure(s):			
-	1300.00 sq ft		
b) Number of permanent flood openings in the crawlspace or e		adjacent grade 8	
c) Total net area of flood openings in A8.b408.	<u>00</u> sq in		
d) Engineered flood openings? X Yes No			
A9. For a building with an attached garage:			
a) Square footage of attached garageN	I/A sq ft		
b) Number of permanent flood openings in the attached garage	e within 1.0 foot above adjacent g	rade N/A	
	N/A sq in		
d) Engineered flood openings?  Yes No			
SECTION B - FLOOD INSURANCE		TION	
	County Name ASOTA	B3. State Florida	
B4. Map/Panel Number B5. Suffix B6. FIRM Index Date B7. FIRM Pa	e/ Zone(s) (Z	lase Flood Elevation(s) Zone AO, use Base Flood Depth)	
12115C-0019 F 11-04-2016 11-04-2016	AE 11 FE	ET	
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:			
☐ FIS Profile ☒ FIRM ☐ Community Determined ☐ Other/Source:			
B11. Indicate elevation datum used for BFE in Item B9:  NGVD	1929 🗵 NAVD 1988 🔲 🚮	EGEN/ED	
B12. Is the building located in a Coastal Barrier Resources System	(CBRS) area or Otherwise Prote	oned Area (OPA)? ☐ Yes ☒ No	
Designation Date: CBRS C	DPA TOWN C	OF LONGBOAT KEY  3. Zoning & Building	
		a building	

# **ELEVATION CERTIFICATE**

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

	ing information from Se		FOR INSURANCE COMPANY USE		
Building Street Address (including Apt., Unit, Suite, and 3470 GULF OF MEXICO DR	d/or Bldg. No.) or P.O. Ro	ute and Box No.	Policy Number:		
City State ZIP Code LONGBOAT KEY Florida 34228			Company NAIC Number		
SECTION C - BUILDING	SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)				
C1. Building elevations are based on: Construction   *A new Elevation Certificate will be required when		Iding Under Construing is complete.	uction* X Finished Construction		
C2. Elevations – Zones A1–A30, AE, AH, A (with BFf Complete Items C2.a–h below according to the b	uilding diagram specified	in Item A7. In Puer	/AE, AR/A1–A30, AR/AH, AR/AO. to Rico only, enter meters.		
Benchmark Utilized: SARC - R-7	Vertical Datum				
Indicate elevation datum used for the elevations i		w.			
☐ NGVD 1929  ☐ NAVD 1988 ☐ Other  Datum used for building elevations must be the sign.  Datum use		BFE			
3			Check the measurement used.		
<ul> <li>a) Top of bottom floor (including basement, craw</li> </ul>	Ispace, or enclosure floor	)	7.00 X feet  meters		
b) Top of the next higher floor			17.80 X feet meters		
<ul> <li>Bottom of the lowest horizontal structural mem</li> </ul>	nber (V Zones only)		N/A X feet meters		
d) Attached garage (top of slab)			N/A X feet  meters		
<ul> <li>e) Lowest elevation of machinery or equipment s (Describe type of equipment and location in Co</li> </ul>	servicing the building omments)		13.40 X feet meters		
f) Lowest adjacent (finished) grade next to buildi	ing (LAG)	****	5.30 X feet meters		
g) Highest adjacent (finished) grade next to build	ling (HAG)		6.50 🗵 feet 🗌 meters		
<ul> <li>h) Lowest adjacent grade at lowest elevation of d structural support</li> </ul>	deck or stairs, including		N/A		
SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION					
SECTION D – SURVEYO	R, ENGINEER, OR ARC	CHITECT CERTIF	ICATION		
This certification is to be signed and sealed by a land solution of the certificate representatement may be punishable by fine or imprisonment	surveyor, engineer, or arc nts my best efforts to inter under 18 U.S. Code, Sec	hitect authorized by pret the data availa tion 1001.	law to certify elevation information. ble. I understand that any false		
This certification is to be signed and sealed by a land so I certify that the information on this Certificate represent statement may be punishable by fine or imprisonment.  Were latitude and longitude in Section A provided by a	surveyor, engineer, or arc nts my best efforts to inter under 18 U.S. Code, Sec a licensed land surveyor?	hitect authorized by pret the data availa tion 1001.	law to certify elevation information		
This certification is to be signed and sealed by a land solution of the certificate representatement may be punishable by fine or imprisonment	surveyor, engineer, or arc nts my best efforts to inter under 18 U.S. Code, Sec	hitect authorized by pret the data availa tion 1001.	law to certify elevation information. ble. I understand that any false		
This certification is to be signed and sealed by a land so I certify that the information on this Certificate represent statement may be punishable by fine or imprisonment. Were latitude and longitude in Section A provided by a Certifier's Name	surveyor, engineer, or arc ints my best efforts to inter under 18 U.S. Code, Sec in licensed land surveyor? License Number	hitect authorized by pret the data availa tion 1001.	law to certify elevation information. ble. I understand that any false  Check here if attachments.		
This certification is to be signed and sealed by a land statement the information on this Certificate representatement may be punishable by fine or imprisonment. Were latitude and longitude in Section A provided by a Certifier's Name LELAND E. BEDWELL  Title	surveyor, engineer, or arc ints my best efforts to inter under 18 U.S. Code, Sec in licensed land surveyor? License Number	hitect authorized by pret the data availa tion 1001.	law to certify elevation information.  I understand that any false  ☐ Check here if attachments.		
This certification is to be signed and sealed by a land statement may be punishable by fine or imprisonment.  Were latitude and longitude in Section A provided by a Certifier's Name LELAND E. BEDWELL  Title REGISTERED SURVEYOR  Company Name	surveyor, engineer, or arc ints my best efforts to inter under 18 U.S. Code, Sec in licensed land surveyor? License Number	hitect authorized by pret the data availa tion 1001.	law to certify elevation information.   while. I understand that any false		
This certification is to be signed and sealed by a land statement may be punishable by fine or imprisonment.  Were latitude and longitude in Section A provided by a Certifier's Name LELAND E. BEDWELL  Title REGISTERED SURVEYOR  Company Name LELAND E. BEDWELL SURVEYING, INC.  Address	surveyor, engineer, or arc ints my best efforts to inter under 18 U.S. Code, Sec in licensed land surveyor? License Number	hitect authorized by pret the data availa tion 1001.	I law to certify elevation information.  I understand that any false  I Check here if attachments.  Digitally signed by Leland e. Bedwell		
This certification is to be signed and sealed by a land of a linear line	surveyor, engineer, or arc ints my best efforts to inter under 18 U.S. Code, Sec il licensed land surveyor? License Number PSM 5884	hitect authorized by pret the data availation 1001.  Yes No	Digitally signed by Leland e. Bedwell Date: 2018.05.06		
This certification is to be signed and sealed by a land of a linear line	Surveyor, engineer, or arconts my best efforts to interunder 18 U.S. Code, Second licensed land surveyor?  License Number PSM 5884  State Florida  Date 04-20-2018	hitect authorized by pret the data availation 1001.  ☐ Yes ☒ No  ZIP Code 34203  Telephone (941) 753-9994	Digitally signed by Leland e. Bedwell Date: 2018.05.06 17:57:28 -04'00' 04-20-2018  Ext. NA		
This certification is to be signed and sealed by a land of a linearity that the information on this Certificate represents tatement may be punishable by fine or imprisonment. Were latitude and longitude in Section A provided by a Certifier's Name LELAND E. BEDWELL  Title REGISTERED SURVEYOR  Company Name LELAND E. BEDWELL SURVEYING, INC.  Address 3423 55TH DRIVE EAST  City BRADENTON  Signature	State Florida  Date 04-20-2018  THE BUILDING BEING DE EARTH ADDRESS LO NG COVERAGE AND EAG FOYER = 8.3 FEET, RO	ZIP Code 34203  Telephone (941) 753-9994 ficial, (2) insurance a	Digitally signed by Leland e. Bedwell Date: 2018.05.06 17:57:28 -04'00' 04-20-2018  Ext. NA  Agent/company, and (3) building owner.  SEE ATTACHED SEE PHOTOS/, RE 8 VENTS LOCATED ON THE A NET AREA OF 51 SQ IN AND IS		

# **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE	
Building Street Address (including Apt., Unit, Suite, and/or Bl 3470 GULF OF MEXICO DR	Policy Number:			
City State LONGBOAT KEY Florida		Code 28	Company NAIC Number	
SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)				
For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B,and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.				
E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).				
a) Top of bottom floor (including basement, crawlspace, or enclosure) is     b) Top of bottom floor (including basement,	N/A	☐ feet ☐ meter	s above or below the HAG.	
crawlspace, or enclosure) is	N/A	feet meter		
E2. For Building Diagrams 6–9 with permanent flood opening the next higher floor (elevation C2.b in the diagrams) of the building is	gs provided in Section N/A			
E3. Attached garage (top of slab) is	N/A	☐ feet ☐ meters		
E4. Top of platform of machinery and/or equipment servicing the building is	N/A	☐ feet ☐ meters		
E5. Zone AO only: If no flood depth number is available, is th floodplain management ordinance?   Yes No	e top of the bottom f Unknown. The	floor elevated in acc	cordance with the community's	
SECTION F – PROPERTY OWNER (C	OR OWNER'S REPR	RESENTATIVE) CE	RTIFICATION	
The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.				
Property Owner or Owner's Authorized Representative's Nam N/A	е			
Address N/A	City N/A	Sta	te ZIP Code N/A	
Signature	Date	Tele	ephone	
Comments				
			Check here if attachments.	

# **ELEVATION CERTIFICATE**

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 3470 GULF OF MEXICO DR	pt., Unit, Suite, and/or Bldg. No.)	or P.O. Route and Box N	lo. Policy Number:
City	State	ZIP Code	Company NAIC Number
LONGBOAT KEY	Florida	34228	
	SECTION G - COMMUNITY	•	
The local official who is authorized by Sections A, B, C (or E), and G of this used in Items G8–G10. In Puerto Ri	s Elevation Certificate. Complete	the community's floodpla the applicable item(s) an	in management ordinance can complete d sign below. Check the measurement
G1. The information in Section engineer, or architect who data in the Comments are	is authorized by law to certify ele	ntation that has been sigrevation information. (Indicated)	ned and sealed by a licensed surveyor, ate the source and date of the elevation
G2. A community official comp or Zone AO.	leted Section E for a building loc	ated in Zone A (without a	FEMA-issued or community-issued BFE)
G3. The following information (	Items G4–G10) is provided for o	ommunity floodplain mana	agement purposes.
G4. Permit Number	G5. Date Permit Iss	ued	G6. Date Certificate of Compliance/Occupancy Issued
G7. This permit has been issued for		Substantial Improvemen	nt
G8. Elevation of as-built lowest floo of the building:	r (including basement) ——		feet meters Datum
G9. BFE or (in Zone AO) depth of fl	ooding at the building site:	□	feet meters Datum
G10. Community's design flood eleve	ation:		feet meters Datum
Local Official's Name		Title	
Community Name		Telephone	
Signature		Date	
Comments (including type of equipme	ent and location, nor C2(a) if ann	dicable)	
Comments (including type of equipme	ent and location, per C2(e), if app	ilicable)	
			☐ 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, copy the corresponding 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. 3470 GULF OF MEXICO DR			Policy Number:
City LONGBOAT KEY	State Florida	ZIP Code 34228	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.

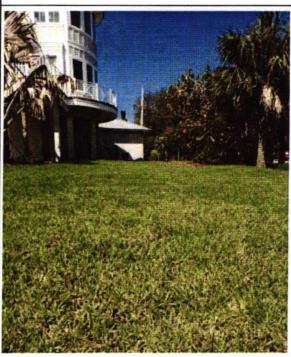






Photo One

Photo One Caption

Clear Photo One





Photo Two

Photo Two Caption

Clear Photo Two

## **BUILDING PHOTOGRAPHS**

# **ELEVATION CERTIFICATE**

Continuation Page

OMB No. 1660-0008

Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding 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. 3470 GULF OF MEXICO DR			Policy Number:
City LONGBOAT KEY	State Florida	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." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.



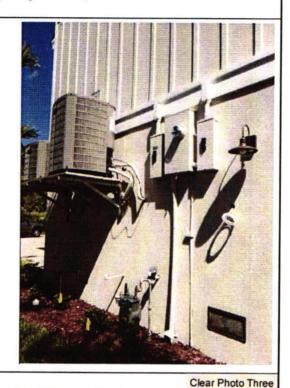


Photo Three

Photo Three Caption





Photo Four

Photo Four Caption

Clear Photo Four



NATIONAL FLOOD INSURANCE PROGRAM

# **ELEVATION CERTIFICATE**

**AND** 

**INSTRUCTIONS** 

**2015 EDITION** 

RECEIVED

MAY - 9 2018

TOWN OF LONGBOAT KEY Planning, Zoning & Building

OMB No. 1660-0008

Expiration Date: November 30, 2018

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

# **ELEVATION CERTIFICATE AND INSTRUCTIONS**

### **Paperwork Reduction Act Notice**

Public reporting burden for this data collection is estimated to average 3.75 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and submitting this form. You are not required to respond to this collection of information unless a valid OMB control number is displayed on this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing the burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 1800 South Bell Street, Arlington, VA 20598-3005, Paperwork Reduction Project (1660-0008). **NOTE: Do not send your completed form to this address.** 

#### **Privacy Act Statement**

Authority: Title 44 CFR § 61.7 and 61.8.

**Principal Purpose(s):** This information is being collected for the primary purpose of estimating the risk premium rates necessary to provide flood insurance for new or substantially improved structures in designated Special Flood Hazard Areas.

Routine Use(s): The information on this form may be disclosed as generally permitted under 5 U.S.C. § 552a(b) of the Privacy Act of 1974, as amended. This includes using this information as necessary and authorized by the routine uses published in DHS/FEMA-003 – National Flood Insurance Program Files System or Records Notice 73 Fed. Reg. 77747 (December 19, 2008); DHS/FEMA/NFIP/LOMA-1 – National Flood Insurance Program (NFIP) Letter of Map Amendment (LOMA) System of Records Notice 71 Fed. Reg. 7990 (February 15, 2006); and upon written request, written consent, by agreement, or as required by law.

**Disclosure:** The disclosure of information on this form is voluntary; however, failure to provide the information requested may result in the inability to obtain flood insurance through the National Flood Insurance Program or the applicant may be subject to higher premium rates for flood insurance. Information will only be released as permitted by law.

#### Purpose of the Elevation Certificate

The Elevation Certificate is an important administrative tool of the National Flood Insurance Program (NFIP). It is to be used to provide elevation information necessary to ensure compliance with community floodplain management ordinances, to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).

The Elevation Certificate is required in order to properly rate Post-FIRM buildings, which are buildings constructed after publication of the Flood Insurance Rate Map (FIRM), located in flood insurance Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, and AR/AO. The Elevation Certificate is not required for Pre-FIRM buildings unless the building is being rated under the optional Post-FIRM flood insurance rules.

As part of the agreement for making flood insurance available in a community, the NFIP requires the community to adopt floodplain management regulations that specify minimum requirements for reducing flood losses. One such requirement is for the community to obtain the elevation of the lowest floor (including basement) of all new and substantially improved buildings, and maintain a record of such information. The Elevation Certificate provides a way for a community to document compliance with the community's floodplain management ordinance.

Use of this certificate does not provide a waiver of the flood insurance purchase requirement. Only a LOMA or LOMR-F from the Federal Emergency Management Agency (FEMA) can amend the FIRM and remove the Federal mandate for a lending institution to require the purchase of flood insurance. However, the lending institution has the option of requiring flood insurance even if a LOMA/LOMR-F has been issued by FEMA. The Elevation Certificate may be used to support a LOMA or LOMR-F request. Lowest floor and lowest adjacent grade elevations certified by a surveyor or engineer will be required if the certificate is used to support a LOMA or LOMR-F request. A LOMA or LOMR-F request must be submitted with either a completed FEMA MT-EZ or MT-1 package, whichever is appropriate.

This certificate is used only to certify building elevations. A separate certificate is required for floodproofing. Under the NFIP, non-residential buildings can be floodproofed up to or above the Base Flood Elevation (BFE). A floodproofed building is a building that has been designed and constructed to be watertight (substantially impermeable to floodwaters) below the BFE. Floodproofing of residential buildings is not permitted under the NFIP unless FEMA has granted the community an exception for residential floodproofed basements. The community must adopt standards for design and construction of floodproofed basements before FEMA will grant a basement exception. For both floodproofed non-residential buildings and residential floodproofed basements in communities that have been granted an exception by FEMA, a floodproofing certificate is required.

Additional guidance can be found in FEMA Publication 467-1, Floodplain Management Bulletin: Elevalitic Certificate available on FEMA's website at <a href="https://www.fema.gov/media-library/assets/documents/3539?id=1727">https://www.fema.gov/media-library/assets/documents/3539?id=1727</a>.

TOWN OF LONGBOAT KEY Planning, Zoning & Building<sub>F-053</sub>



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# **ICC-ES Evaluation Report**

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

**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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**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)<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® 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  $\frac{1}{4}$ -inch-by- $\frac{1}{4}$ -inch (6.35 by 6.35 mm) openings, vielding 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

 ${\sf SmartVENT}^{\circledast}$  and  ${\sf FloodVENT}^{\circledast}$  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 Stacking Model #1540-511 and SmartVENT® FloodVENT® Stacking Model #1540-521 must be



installed with a minimum of one FV for every  $400 \text{ square feet } (37.2 \text{ m}^2) \text{ of enclosed area.}$ 

- 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<sup>®</sup> 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 <sup>®</sup>	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 <sup>®</sup> Stacker	1540-511	16" X 16"	400
FloodVent <sup>®</sup> Stacker	1540-521	16" X 16"	400

For SI: 1 inch = 25.4 mm; 1 square foot =  $\text{m}^2$ 

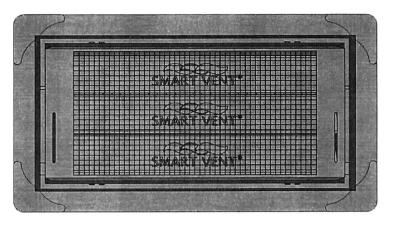


FIGURE 1—SMART VENT: MODEL 1540-510

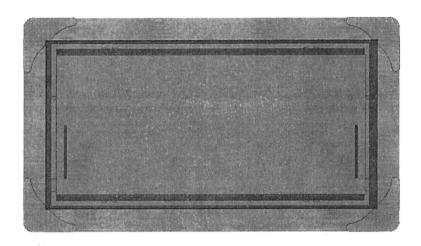


FIGURE 2—SMART VENT MODEL 1540-520

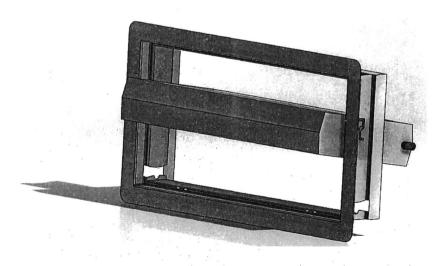


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



# **ICC-ES Evaluation Report**

# ESR-2074 CBC and CRC Supplement

Issued February 2017 Revised November 2017

This report is subject to renewal February 2019.

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<sup>®</sup>.

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.

