#### U.S. DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency National Flood Insurance Program

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

## 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.

		TY INFORMATION		I FOR INSURANCE COMBAN
A1. Building Owner's Name KYLE & AMANDA KLEPPIN	050			FOR INSURANCE COMPAN Policy Number:
A2. Building Street Address Box No.	(Including Apt., Unit, Su	iite, and/or Bldg. No.) o	or P.O. Route and	Company NAIC Number:
411 FIREHOUSE COURT			ompany reac reamber.	
City		State		ZIP Code
LONGBOAT KEY		Florida		24220
A3. Property Description (Lo	t and Block Numbers, T	ax Parcel Number, Leg	gal Description, et	tc.)
LOT 7, CONRAD BEACH SU	JBDIVISION, TAX ID #7	817200669		,
A4. Building Use (e.g., Resid	dential, Non-Residential,	Addition, Accessory, 6	etc.) RESIDEN	ITIAI
A5. Latitude/Longitude: Lat.		Long82.68648°		
A6. Attach at least 2 photogr	anhe of the building if the		nonzonta	l Datum: NAD 1927 X NAD 19
A6. Attach at least 2 photogra	apris of the building if the	e Certificate is being u	sed to obtain floor	d insurance.
A7. Building Diagram Numbe				
A8. For a building with a craw				
<ul> <li>a) Square footage of cra</li> </ul>	wispace or enclosure(s)		1180 sq ft	
b) Number of permanent	flood openings in the cr	awlenace or enclosure	(a) within 4.0 for a	
c) Total net area of flood	openings in AR h. A.C.			
			( ) L Jeffrey beet of r	y L. Vogel, PE 461235, hereby certify that to my knowledge and belief the plans submitte
<ul> <li>d) Engineered flood oper</li> </ul>	nings? 🛛 Yes 🗌 N	No	reviewed	d for and are, in compliance with the 2017 F
A9. For a building with an atta	ched garage:		Contract of	Code, 6th Edition and all local amendments Building Code. I am-duly authorized to perf
			Honda 8	
			plana re	view pursuant to Section 7553.791, Florida 5
a) Square footage of attack	ched garage	0 sq ft	plana re- and hold Stanature	view pursuant to Section 7553.791, Florida 5 I the appropriete license.  Date: Sheet
a) Square footage of attack	ched garage		plana re- and hold Stanature	view pursuant to Section 7553.791, Florida 5 I the appropriete license.  Date: Sheet
	ched garage	cached garage within 1.	plene re- and hold Signature .0 foot above adja	view pursuant to Section 7553.791, Florida 5 I the appropriete license.  Date: Sheet
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a) Square footage of attai b) Number of permanent i c) Total net area of flood of d) Engineered flood openi S 31. NFIP Community Name & TOWN OF LONGBOAT KEY - 4. Map/Panel Number B5. Suffix	ched garage  flood openings in the att openings in A9.b ings? Yes N  iECTION B – FLOOD II  Community Number 125126  B6. FIRM Index Date	o sq ii  NSURANCE RATE M B2. County N MANATEE  B7. FIRM Panel Effective/	.0 foot above adja	PRIMATION  By State Company Co
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a) Square footage of attain b) Number of permanent if c) Total net area of flood of d) Engineered flood openion  S B1. NFIP Community Name & TOWN OF LONGBOAT KEY - 4. Map/Panel Number B5. Suffix E	ched garage  flood openings in the att openings in A9.b  ings? Yes N  ECTION B – FLOOD II  Community Number 125126  B6. FIRM Index Date  03-17-2014	o sq ii  NSURANCE RATE M B2. County N MANATEE  B7. FIRM Panel Effective/ Revised Date 03-17-2014	n IAP (FIRM) INFO ame  B8. Flood Zone(s)  AE	DRMATION  B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth
a) Square footage of attact b) Number of permanent if c) Total net area of flood of d) Engineered flood openi  S 31. NFIP Community Name & TOWN OF LONGBOAT KEY - 4. Map/Panel Number B5. Suffix E081C0283 E 110. Indicate the source of the	ched garage  flood openings in the att openings in A9.b  ings? Yes N  ECTION B – FLOOD II  Community Number 125126  B6. FIRM Index Date  03-17-2014  Base Flood Elevation (	DESCRIPTION OF THE PROPERTY OF	Dane re- and hold Signature  Of foot above adja  DAP (FIRM) INFO  ame  B8. Flood Zone(s)  AE	DRMATION  B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth
a) Square footage of attact b) Number of permanent if c) Total net area of flood of d) Engineered flood openi  S 31. NFIP Community Name & TOWN OF LONGBOAT KEY - 4. Map/Panel Number B5. Suffix E081C0283 E 110. Indicate the source of the	ched garage  flood openings in the att openings in A9.b  ings? Yes N  ECTION B – FLOOD II  Community Number 125126  B6. FIRM Index Date  03-17-2014  Base Flood Elevation (	DESCRIPTION OF THE PROPERTY OF	Dane re- and hold Signature  Of foot above adja  DAP (FIRM) INFO  ame  B8. Flood Zone(s)  AE	DRMATION  B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth
a) Square footage of attact b) Number of permanent in c) Total net area of flood of d) Engineered flood opening S B1. NFIP Community Name & FOWN OF LONGBOAT KEY - 4. Map/Panel Number B5. Suffix E B10. Indicate the source of the	ched garage  flood openings in the att openings in A9.b  ings? Yes N  ECTION B - FLOOD II  Community Number 125126  B6. FIRM Index Date  03-17-2014  Base Flood Elevation (  Community Determines	B2. County N MANATEE  B7. FIRM Panel Effective/ Revised Date 03-17-2014  BFE) data or base floorined Other/Source	MAP (FIRM) INFO	DRMATION  B3. State Florida  B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth  11'  I term B9:
a) Square footage of attact b) Number of permanent if c) Total net area of flood of d) Engineered flood opening S 31. NFIP Community Name & FOWN OF LONGBOAT KEY - 4. Map/Panel Number B5. Suffix 1081C0283  E	ched garage  flood openings in the att openings in A9.b  ings? Yes N  ECTION B - FLOOD II  Community Number 125126  B6. FIRM Index Date  03-17-2014  Base Flood Elevation (  Community Determines	B2. County N MANATEE  B7. FIRM Panel Effective/ Revised Date 03-17-2014  BFE) data or base floorined Other/Source	MAP (FIRM) INFO	DRMATION  B3. State Florida  B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth  11'  I term B9:
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a) Square footage of attain b) Number of permanent if c) Total net area of flood of d) Engineered flood opening SB1. NFIP Community Name & FOWN OF LONGBOAT KEY - 4. Map/Panel Number B5. Suffix E B10. Indicate the source of the FIS Profile FIRM S11. Indicate elevation datum of s12. Is the building located in a	ched garage  flood openings in the att openings in A9.b  ings?	BZ. County N MANATEE  B7. FIRM Panel Effective/ Revised Date 03-17-2014  BFE) data or base floo pined Other/Source C NGVD 1929 X  roes System (CBRS) a	Dinne re- and hold  Signature  O foot above adja  IMAP (FIRM) INFO  IMAP (FIRM) INFO	DRMATION  B3. State Florida  B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth  11'  I term B9:
a) Square footage of attact b) Number of permanent in c) Total net area of flood of d) Engineered flood opening  SB1. NFIP Community Name & TOWN OF LONGBOAT KEY -  4. Map/Panel Number 2081C0283  B5. Suffix E B10. Indicate the source of the FIS Profile  FIRM	ched garage  flood openings in the att openings in A9.b  ings?	B7. Firm Panel Effective/ Revised Date 03-17-2014  BFE) data or base floorined Other/Source Circle NGVD 1929	Dinne re- and hold  Signature  O foot above adja  IMAP (FIRM) INFO  IMAP (FIRM) INFO	DRMATION  B3. State Florida  B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth  11'  Other/Source:

## **ELEVATION CERTIFICATE**

OMB No. 1660-0008 Expiration Date: Nove

IMPORTANT: In these spaces, copy the corre	Sponding information from	Castley A		-	November 30, 202.
Building Street Address (including Apt., Unit, Su 411 FIREHOUSE COURT	ite, and/or Bldg. No.) or P.O.	Route and Box No.	FOR INSU Policy Nur		CE COMPANY US
City LONGBOAT KEY		ZIP Code 34228	Company	NAIC	Number
SECTION C - BUIL	DING ELEVATION INFORM	ATION (SURVEY R	FOURED		
C1. Building elevations are based on:	construction Drawings*	Building Under Constru			hed Construction
*A new Elevation Certificate will be require C2. Elevations – Zones A1–A30 AE AH A (a)	of when construction of the bu	ilding is complete.			
C2. Elevations – Zones A1–A30, AE, AH, A (w Complete Items C2.a–h below according t Benchmark Utilized: FEMA BM RM-3	and bending diagram specim	Built Rem A/. In Puero	AE, AR/A1- o Rico only,	A30, A	AR/AH, AR/AO. meters.
Indicate elevation datum used for the elevation		ım: NGVD1929			CIVEN
☐ NGVD 1929 ☑ NAVD 1988 [	Other/Source:	elow.	TO	DEC O	1,
Datum used for building elevations must be	the same as that used for the	o DEE	TOWNO	F / -	1 2020
			Check	the me	asurement used.
<ul> <li>a) Top of bottom floor (including basemen</li> </ul>	t, crawispace, or enclosure flo	oor)	5.0		meters
<ul> <li>b) Top of the next higher floor</li> </ul>			16.6 ×	feet	meters
<ul> <li>c) Bottom of the lowest horizontal structure</li> </ul>	al member (V Zones only)		N/A 🔀	feet	meters
d) Attached garage (top of slab)	, , , , , , , , , , , , , , , , , , , ,				meters
<ul> <li>e) Lowest elevation of machinery or equip (Describe type of equipment and location</li> </ul>	ment servicing the building				meters
f) Lowest adjacent (finished) grade next to	-				
g) Highest adjacent (finished) grade next t					meters
			4.5	feet	meters meters
h) Lowest adjacent grade at lowest elevati structural support				feet	meters
SECTION D - SUR	VEYOR, ENGINEER, OR A	RCHITECT CERTIFIC	CATION		
This certification is to be signed and sealed by a I certify that the information on this Certificate re statement may be punishable by fine or imprisor	a land surveyor, engineer, or a apresents my best efforts to in anment under 18 U.S. Code, S	rchitect authorized by terpret the data availab ection 1001.		y eleva tand th	ation information.
Were latitude and longitude in Section A provide Certifier's Name	ed by a licensed land surveyor	? ⊠Yes □No	Chec     Che	k here	if attachments.
B. GREGORY RIETH	License Number 5228				$\overline{}$
Title PSM/CFM	t Jeffrey L Voget PE 461235, he best of my knowledge and belie		5	6	N 90
	reviewed for and are, in complice the state of the state	nce with the 2017 Florida	1	150	100
Company Name STRAYER SURVEYING AND MAPPING, INC.	Florida Building Code. I am dult	authorized to perform	4	( )	1.00
Address	plans review pursuant to Section and hold-the-appropriate-licens		1 1	181	9931 . ·
742 SHAMROCK BLVD	10/16/2		14	250	ři po
City VENICE	State Florida	ZIP Code 34293	1.0	Q.	VO.
Signature	Date	Telephone	Es.4		
Copy all pages of this Elevation Certificate and all	10-06-2020	(941) 497-1290	Ext.		
Comments (including two of a suited and all a	attachments for (1) community	official, (2) insurance ag	ent/compan	y, and	(3) building owner.
Comments (including type of equipment and loca FILE #19-12-43. THE OUTSIDE A/C UNIT ON TI WAS DERIVED FROM A HAND HELD G.P.S. UI "C" WERE CONVERTED FROM N.G.V.D. 1929 PROGRAM. SUBJECT STRUCTURE HAS (9) FI TIME OF FIELD WORK, THERE WERE (7) VEN ES EVALUATION REPORT ESR-2074.	HE WEST SIDE OF THE HON NIT (GPSTEST APP - NO CO DATUM TO N.A.V.D. 1988 D/ LOOD VENTS: ENGINEERED	ATUM USING VERTO	TONS SHO	WN IN	SECTION

## **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corresponding	information from S	ection A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/o 411 FIREHOUSE COURT	r Bldg. No.) or P.O. R	oute and Box No.	Policy Number:
	rida 3	P Code 1228	Company NAIC Number
	O AND ZONE A (V	/ITHOUT BFE)	*
For Zones AO and A (without BFE), complete Items E1–E complete Sections A, B,and C. For Items E1–E4, use nature meters.	5. If the Certificate is aral grade, if available	intended to support a Check the measure	a LOMA or LOMR-F request, ment used. In Puerto Rico only,
E1. Provide elevation information for the following and ch the highest adjacent grade (HAG) and the lowest adja-	eck the appropriate bacent grade (LAG).	oxes to show whether	or the elevation is above or below
Top of bottom floor (including basement, crawlspace, or enclosure) is		feet mete	rs above or below the HAG.
b) Top of bottom floor (including basement, crawlspace, or enclosure) is		feet meter	
E2. For Building Diagrams 6–9 with permanent flood oper the next higher floor (elevation C2.b in the diagrams) of the building is	nings provided in Sec	_	9 (see pages 1–2 of Instructions),
E3. Attached garage (top of slab) is		feet meter	
E4. Top of platform of machinery and/or equipment servicing the building is		_	
E5. Zone AO only: If no flood depth number is available is	s the top of the bottor	feet meter	
Tes N	O U Unknown.	ne local official must o	certify this information in Section G.
SECTION F - PROPERTY OWNER	R (OR OWNER'S RE	PRESENTATIVE) CE	RTIFICATION
The property owner or owner's authorized representative v community-issued BFE) or Zone AO must sign here. The s Property Owner or Owner's Authorized Representative's N	reactions in Section	ns A, B, and E for Zo s A, B, and E are con	ne A (without a FEMA-issued or rect to the best of my knowledge.
Address	City	Sta	ate ZIP Code
Signature	Date	Tei	ephone
Comments			
		best of my know reviewed for an Building Code, 6 Florida Building plans review pur	ei, PE #81235, hereby certify that to the fedge and belief the plane submitted were dure, in compliance with the 2017 Florida. Ith Edition and all local amendments to the Code. I am stuly authorized to perform rewant to Section ?553.791, Florida Statue propriete license.  Date: Sheetof  10/16/2020
			1

### **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corr	responding information from	n Section A	FOR INCURANCE CONTRACTOR
Building Street Address (including Apt., Unit, S	uite, and/or Bldg. No.) or P.O	. Route and Box No.	FOR INSURANCE COMPANY USE Policy Number:
411 FIREHOUSE COURT			
City LONGBOAT KEY	State	ZIP Code	Company NAIC Number
	Florida	34228	
	ON G - COMMUNITY INFOR		
The local official who is authorized by law or or Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, en	iter meters.	plicable item(s) and sign	below. Check the measurement
G1. The information in Section C was tak engineer, or architect who is authoriz data in the Comments area below.)	sec by law to certify elevation (	information. (Indicate the	source and date of the elevation
G2. A community official completed Section Zone AO.	ion E for a building located in 2	Zone A (without a FEMA	-issued or community-issued BFE)
G3. The following information (Items G4-	G10) is provided for communi	ity floodplain manageme	nt purposes.
G4. Permit Number	G5. Date Permit Issued	G6. D	ate Certificate of ompliance/Occupancy Issued
G7. This permit has been issued for:	New Construction  Subst	antial Improvement	
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 to	he building site:	feet	meters Datum
G10. Community's design flood elevation:		feet	meters Datum
Local Official's Name  Septieur R. DI HWOOD	Title	R	020
Community Name	Tolon	phone	Jan 120
Town of Langbort	KEY	941-316-1	966 Ext 2511
Stoly R. Duovolie 1.	Date .	4/23/21	
Comments (including type of equipment and local			
AB.C Chapped to 51g  NET free DEFA  NEH (51x9:459)	SER FLOOR	best of my know reviewed for and Building Code, 6 Florida Building C	ix PE #81235, hereby certify that to the edge and betef the plans submitted were it are, in compliance with the 2017 Florida, the Edition and all local emendments to the code. I am duly authorized to perform suant to Section 7553.791, Florida Statue proprietie locans.  Date: Sheetof
			☐ Check here if attachments.

### **BUILDING PHOTOGRAPHS**

**ELEVATION CERTIFICATE** 

See Instructions for Item A6.

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

IMPORTANT: In these spaces, copy the corresponding information from Section A. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.

FOR INSURANCE COMPANY USE

Policy Number: 411 FIREHOUSE COURT

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.

Jeffrey L. Vogel, PE 961235, hereby certify the set of my knowledge and belief the plans submeviewed for and are, in compliance with the 201 nd hold the appropriate license. kmature

luikding Code, 8th Edition and all local amendments forida Building Code. I am duty authorized to perform lens review pursuant to Section 7553.791, Florida

10/16/2020



FRONT VIEW 10-09-2020

Photo One Caption

Clear Photo One



REAR VIEW 10-09-2020

Photo Two Caption

Clear Photo Two

#### **BUILDING PHOTOGRAPHS**

**ELEVATION CERTIFICATE** 

Continuation Page

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

IMPORTANT. In 41			- P
IMPORTANT: In these spaces, copy the correspondence of the corresp	onding informati	on from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, 411 FIREHOUSE COURT	and/or Bldg. No.)	or P.O. Route and Box No.	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.

Jeffrey L. Vogel, PE 461235, hereby certify the set of my knowledge and belief the plans as eviewed for and are, in compliance with the taking Code, 8th Edition and all local amend. forida Building Code. I am chily authorized ians review pursuant to Section 7553.791, Find hold the appropriate ficense. konsture Date:

10/16/2020



**VENTS 10-09-2020** 

Photo Three Caption

Clear Photo Three



Photo Four Caption

VENTS 10-09-2020

Clear Photo Four



Most Widely Accepted and Trusted

# **ICC-ES Evaluation Report**

ESR-2074

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

Reissued 02/2019 This report is subject to renewal 02/2021.

**DIVISION: 08 00 00—OPENINGS** SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

> L Jeffrey L. Vogel, PE #61235, hereby certify that to the best of my knowledge and belief the plans submitted wer reviewed for and are, in compliance with the 2017 Florida Building Code, 6th Edition and all local amendments to th Florida Building Code. I am duly authorized to perform plans review pursuant to Section 7553.791, Florida Stalus and hold the appropriete license.

10/16/2020

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

### **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 FLOOD VENT SEALING KIT #1540-526



"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"

A Subsidiary of a

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.





best of my knowledge and belief the plans submitted were reviewed for and are, in compliance with the 2017 Florida. Building Code, 6th Edition and all local emendments to the Shand of

Most Widely Accepted and Trusted

## **ICC-ES Evaluation Report**

**ESR-2074** 

Reissued February 2019 This report is subject to renewal February 2021.

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:

SMART VENT PRODUCTS, INC.

**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 FLOOD VENT SEALING KIT #1540-526

#### 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018, 2015, 2012, 2009 and 2006 International Building Code® (IBC)
- 2018, 2015, 2012, 2009 and 2006 International Residential Code® (IRC)
- 2018 International Energy Conservation Code® (IECC)
- 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 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.

#### 3.4 Flood Vent Sealing Kit:

The Flood Vent Sealing Kit Model #1540-526 is used with SmartVENT® Model #1540-520. It is a Homasote 440 Sound Barrier® (ESR-1374) Insert with 21 - 2-inch-by-2inch (51 mm x 51 mm) squares cut in it. See Figure 4.

### 4.0 DESIGN AND INSTALLATION

### 4.1 SmartVENT® and FloodVENT®:

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

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square





feet (18.6 m²) of enclosed area, except that the SmartVENT® Stacking Model #1540-511 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 grade or floor and finished exterior grade immediately under each opening.

### 4.2 Flood Vent Sealing Kit

The Flood Vent Sealing Kit Model 1540-526 is used in conjunction with FloodVENT® Model #1540-520. When installed and tested in accordance with ASTM E283, the FV and Flood Vent Sealing Kit assembly have an air leakage rate of less than 0.2 cubic feet per minute per lineal foot (18.56 l/min per lineal meter) at a pressure differential of 1 pound per square foot (50 Pa) based on 12.58 lineal feet (3.8 lineal meters) contained by the Flood Vent Sealing Kit.

### 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

- 6.1 Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015 (editorially revised October 2017).
- 6.2 Test report on air infiltration in accordance with ASTM E283.

#### 7.0 IDENTIFICATION

- 7.1 The Smart VENT® models and the Flood Vent Sealing Kit 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).
- 7.2 The report holder's contact information is the following:

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

TABLE 1-MODEL SIZES

MODEL NAME	MODEL NUMBER		
FloodVENT®		MODEL SIZE (in.)	COVERAGE (sq. ft.)
	1540-520	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	
Smart/ENT®	1540-510		200
FloodVENT® Overhead Door		15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Overhead Door	1540-524	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
Vood Wall FloodVENT® Overhead Door	1540-574	•	200
SmartVENT® Stacker		14" X 8 <sup>3</sup> / <sub>4</sub> "	200
FloodVent® Stacker	1540-511	16" X 16"	
Tiouvent Stacker	1540-521	16" X 16"	400
Si: 1 inch = 25.4 mm; 1 square foot = m <sup>2</sup>		10 V 10.	400

Jeffrey L. Vogel, PE #81235, hereby certify that to the est of my knowledge and belief the plans submitted w eviewed for and are, in compliance with the 2017 Flori tuilding Code, 6th Edition and all local amendments to the forida Building Code. I am duly authorized to perform lens review pursuant to Section 7553.791, Florida Status nd hold the appropriate license. ignature: Date: Sheet 10/16/2020

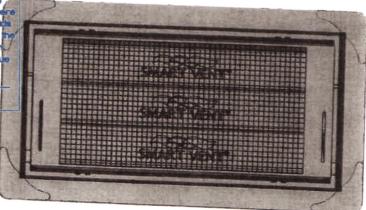


FIGURE 1-SMART VENT: MODEL 1540-510

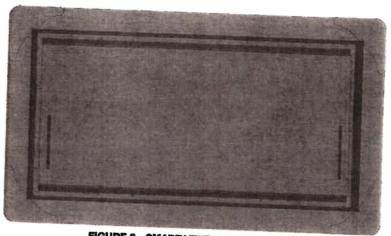


FIGURE 2-SMART VENT MODEL 1540-520

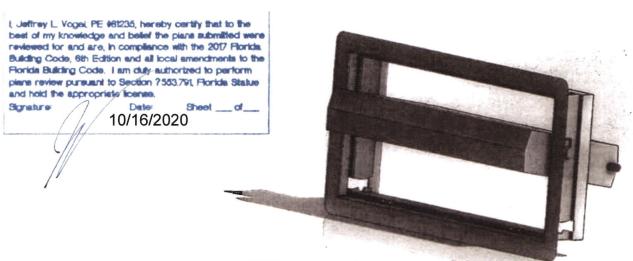
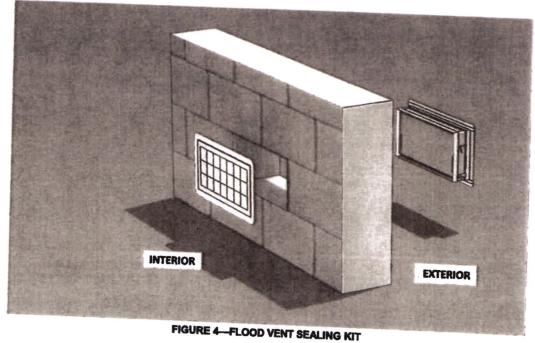


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN





## **ICC-ES Evaluation Report**

## **ESR-2074 CBC and CRC Supplement**

Reissued February 2019

This report is subject to renewal February 2021.

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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:

SMART VENT PRODUCTS, INC.

**EVALUATION SUBJECT:** 

L Jeffrey L. Vogel, PE #61235, hereby certify that to the best of my knowledge and belief the plane submitted were reviewed for and are, in compliance with the 2017 Florida. Building Code, 6th Edition and all local amendments to the Florida Building Code. I am duly authorized to perform plans review pursuant to Section 7553.791, Florida Status and hold the appropriate license. Sheet \_\_\_ of\_ Signature: Date:

10/16/2020

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514 FLOOD VENT SEALING KIT #1540-526

### 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

#### 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

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 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

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

The products recognized in this supplement have not been evaluated for compliance with the International Wildland-Urban Interface Code®.

This supplement expires concurrently with the master report, reissued February 2019.





## **ICC-ES Evaluation Report**

## **ESR-2074 FBC Supplement**

Reissued February 2019

This report is subject to renewal February 2021.

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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:

SMART VENT PRODUCTS, INC.

**EVALUATION SUBJECT:** 

L Jeffrey L. Vogel, PE #81235, hereby certify that to the best of my knowledge and belief the plans submitted were reviewed for and are, in compliance with the 2017 Florida. Building Code, 6th Edition and all local amendments to the Florida Building Code. I am thay authorized to perform plane review pursuant to Section 7553.791, Florida Statue and hold the appropriate license. Skrature Sheet \_\_\_ of\_

10/16/2020

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514 FLOOD VENT SEALING KIT #1540-526

## 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.

- 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

This supplement expires concurrently with the master report, reissued February 2019.