### 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.

	SEC	TION A - PROPERTY	INFOF	RMATION		FOR INSU	RANCE COMPANY USE
A1. Building Owner's Name Adam & Emily Goldman				Policy Num	ber:		
<ul> <li>A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.</li> <li>101 S. Pembroke Avenue</li> </ul>				Company N	NAIC Number:		
City Margate							
A3. Property Desc Block 16, Lot 1	ription (Lot a	nd Block Numbers, Ta	x Parce	el Number, Legal De	escription, etc.)		
A4. Building Use (	e.g., Residen	tial, Non-Residential, A	Addition	n, Accessory, etc.)	Residential		
A5. Latitude/Longi	tude: Lat. <u>N</u>	°39°19'28.6"	Long. <u>V</u>	V74°30'20.8"	Horizontal Datum	: NAD '	1927 🗵 NAD 1983
A6. Attach at least	2 photograp	hs of the building if the	Certific	cate is being used to	o obtain flood insura	ince.	
A7. Building Diagra	am Number	8					
A8. For a building	with a crawls	pace or enclosure(s):					
a) Square foo	age of crawl	space or enclosure(s)		1,200 sq ft			
b) Number of	permanent flo	ood openings in the cra	awlspac	ce or enclosure(s) w	ithin 1.0 foot above	adjacent gr	ade 6
c) Total net ar	ea of flood op	penings in A8.b1,2	00 :	sq in			
d) Engineered	flood openin	gs? 🗵 Yes 🗌 N	0				
A9. For a building v	A9. For a building with an attached garage:						
a) Square footage of attached garage 0 sq ft							
b) Number of newscard fleed exercises in the standard exercises in the							
					ot above adjacent g		0
			0	sq in			
d) Engineered	flood openin	gs? ☐ Yes ☒ N	0				
	SE	CTION B - FLOOD IN	ISURA	NCE RATE MAP	(FIRM) INFORMA	TION	
B1. NFIP Communi				B2. County Name			B3. State
Margate City 34530		•		Atlantic			New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	E	IRM Panel ffective/	B8. Flood Zone(s)	(Zor	L se Flood Elevation(s) ne AO, use Base
345304/0001	С	06/18/1971		evised Date /1983	A8	10.00	od Depth)
B10. Indicate the se	ource of the E	Base Flood Elevation (I	BFE) da	ata or base flood de	oth entered in Item	B9:	
		Community Determ			,		
B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/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							
-			0				

## **ELEVATION CERTIFICATE**

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MPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE	
Building Street Address (including Apt., Unit, Suite, and/ 101 S. Pembroke Avenue	Policy Number:			
City S Margate N	Company NAIC Number			
SECTION C – BUILDING E		TION (SURVEY R	EQUIRED)	
	tion Drawings*	Iding Under Constru		
C2. Elevations – Zones A1–A30, AE, AH, A (with BFE Complete Items C2.a–h below according to the bu Benchmark Utilized: Local BM  Indicate elevation datum used for the elevations in	), VE, V1–V30, V (with B illding diagram specified Vertical Datum	FE), AR, AR/A, AR/ in Item A7. In Puert	AE, AR/A1–A30, AR/AH, AR/AO. o Rico only, enter meters.	
✓ NGVD 1929 ☐ NAVD 1988 ☐ Other				
Datum used for building elevations must be the sa	me as that used for the E	3FE.	Check the measurement used.	
<ul> <li>a) Top of bottom floor (including basement, crawled)</li> </ul>	space, or enclosure floor	)9. <u>0</u>	🔀 feet 🔲 meters	
b) Top of the next higher floor		13 <sub>.</sub> 44	X feet	
c) Bottom of the lowest horizontal structural meml	oer (V Zones only)	N/A	X feet  meters	
d) Attached garage (top of slab)		N/A	X feet	
<ul> <li>e) Lowest elevation of machinery or equipment se (Describe type of equipment and location in Co</li> </ul>	ervicing the building mments)	13. 44	X feet  meters	
f) Lowest adjacent (finished) grade next to buildir	ig (LAG)	9.0	X feet	
g) Highest adjacent (finished) grade next to buildi	ng (HAG)	<u>9</u> . <u>5</u>	X feet	
Lowest adjacent grade at lowest elevation of destructural support	eck or stairs, including	<u> </u>	X feet meters	
SECTION D – SURVEYOR	R, ENGINEER, OR ARG	CHITECT CERTIFI	CATION	
This certification is to be signed and sealed by a land so I certify that the information on this Certificate representatement may be punishable by fine or imprisonment upon the control of the certification of the certi	ts mv best efforts to inter	pret the data availa	law to certify elevation information. ble. I understand that any false	
Were latitude and longitude in Section A provided by a	·		☑ Check here if attachments.	
Certifier's Name James R. Boney, PLS	License Number 31264			
Title Professional Land Surveyor				
Company Name			Place	
James R. Boney & Associates, LLC			Seal Here	
Address 13 Stone Mill Court			riele	
City Egg Harbor Twp	State New Jersey	ZIP Code 08234		
Signature Ammy	Date 06/23/2018	Telephone (609) 788-8013		
Copy all pages of this Elevation Certificate and all attachm	ents for (1) community of	ficial, (2) insurance a	gent/company, and (3) building owner.	
Comments (including type of equipment and location, per Two and a half story frame dwelling on a crawlspace. Al floor. There are six (6) SMART Vents in the crawlspace.	other mechanicals serv	icing the dwelling a	e inside and at or above the finished	

## **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, a 101 S. Pembroke Avenue	nd/or Bldg. No.) or P.	O. Route and Box No.	Policy Number:		
City Margate	State New Jersey	ZIP Code 08402	Company NAIC Number		
SECTION E – BUILDING E FOR ZOI	LEVATION INFORM NE AO AND ZONE A	MATION (SURVEY NOT A (WITHOUT BFE)	REQUIRED)		
For Zones AO and A (without BFE), complete Items E complete Sections A, B,and C. For Items E1–E4, use enter meters.	E1–E5. If the Certificate natural grade, if avail	te is intended to support a able. Check the measure	LOMA or LOMR-F request, ment used. In Puerto Rico only,		
<ul><li>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).</li><li>a) Top of bottom floor (including basement,</li></ul>					
crawlspace, or enclosure) is b) Top of bottom floor (including basement,		feet 🗌 meter	s above or below the HAG.		
crawlspace, or enclosure) is		feet meter	limit limit		
E2. For Building Diagrams 6–9 with permanent flood the next higher floor (elevation C2.b in the diagrams) of the building is	openings provided in	Section A Items 8 and/or			
E3. Attached garage (top of slab) is		feet  meter	s above or below the HAG.		
E4. Top of platform of machinery and/or equipment servicing the building is			s 🔲 above or 🔲 below the HAG.		
E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance?   Yes   No   Unknown. The local official must certify this information in Section G.					
SECTION F - PROPERTY OW	VNER (OR OWNER'S	REPRESENTATIVE) CE	RTIFICATION		
The property owner or owner's authorized representate community-issued BFE) or Zone AO must sign here.	tive who completes So The statements in Sec	ections A, B, and E for Zo ctions A, B, and E are cor	ne A (without a FEMA-issued or rect to the best of my knowledge.		
Property Owner or Owner's Authorized Representative	e's Name				
Address	City	Sta	ate ZIP Code		
Signature	Date	e Tel	lephone		
Comments					
	4				
			Check here if attachments.		

## **ELEVATION CERTIFICATE**

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IMPORTANT: In these spaces, copy the corresp	FOR INSURANCE COMPANY USE				
Building Street Address (including Apt., Unit, Suite, 101 S. Pembroke Avenue	No. Policy Number:				
City Margate	State ZIP Code New Jersey 08402	Company NAIC Number			
SECTION	G - COMMUNITY INFORMATION (OPTIC	ONAL)			
Sections A, B, C (or E), and G of this Elevation Ce	The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8–G10. In Puerto Rico only, enter meters.				
G1. The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)					
G2. A community official completed Section E or Zone AO.	E for a building located in Zone A (without	a FEMA-issued or community-issued BFE)			
G3. The following information (Items G4–G10	0) is provided for community floodplain ma	anagement purposes.			
G4. Permit Number G5	5. Date Permit Issued	G6. Date Certificate of Compliance/Occupancy Issued			
G7. This permit has been issued for:	ew Construction	nent			
G8. Elevation of as-built lowest floor (including bar of the building:	asement)	☐ feet ☐ meters Datum			
G9. BFE or (in Zone AO) depth of flooding at the k	building site:	☐ feet ☐ meters Datum			
G10. Community's design flood elevation:		☐ feet ☐ meters Datum			
Community Name  Title  Community Name  Telephone  MANGATE  Title  CFM  Telephone					
		-822-1974			
Signature Date 11/14/18					
Comments (including type of equipment and location	on, per C2(e), if applicable)	,			
		Check here if attachments.			

(1) The crawlspace foundation is equipped with smart vents. Check with your insurance provider regarding discounts for houses that have these vents properly installed. For more information, see: https://smartvent.com/





9.3 Item 1(Picture)

9.3 Item 2(Picture)

(2) The garage foundation does not have smart vents. Check with your insurance provider to see if the structure is required to have them to obtain the necessary discounts. For more information, see: https://smartvent.com/





9.3 Item 3(Picture)

9.3 Item 4(Picture)

9.4 Venting Systems (Kitchens, Baths and Laundry)

Comments: Inspected

9.5 Ventilation Fans and Thermostatic Controls in Attic

Comments: Not Present

9.6 Insulation (Exterior Walls)

Comments: Not Inspected

The insulation in the exterior walls is not visible at the time of the inspection due to installed wall coverings.

The insulation and ventilation of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Venting of exhaust fans or clothes dryer cannot be fully inspected and bends or obstructions can occur without being accessible or visible (behind wall and ceiling coverings). Only insulation that is visible was inspected. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

2017-0300

## **BUILDING PHOTOGRAPHS**

See Instructions for Item A6.

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

			Expiration bate. November 30, 2016
IMPORTANT: In these spaces, copy the	FOR INSURANCE COMPANY USE		
Building Street Address (including Apt., Ur 101 S. Pembroke Avenue	Policy Number:		
City	State	ZIP Code	Company NAIC Number
Margate	New Jersey	08402	Table 1 and

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 06/21/2018

**ELEVATION CERTIFICATE** 



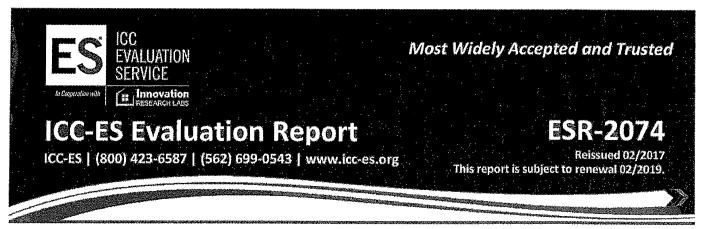
Photo Two

Photo Two Caption Rear 06/21/2018









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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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:

- 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>

 $^{\dagger}\text{The}$  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® 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<sup>®</sup> Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. The SmartVENT<sup>®</sup> Stacking Model #1540-511 and FloodVENT<sup>®</sup> 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.

### 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. 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 and 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<sup>®</sup> FVs must be installed in accordance with this report, the applicable code and the manufacturer's installation instructions. In the event of a conflict, the instructions in this report govern. 5.2 The Smart Vent<sup>®</sup> FVs must not be used in the place of "breakaway walls" in coastal high hazard areas, but are permitted for use in conjunction with breakaway walls in other areas.

#### 6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015.

#### 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 <sup>®</sup>	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 <sup>®</sup> Overhead Door	1540-524	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200	
SmartVENT <sup>®</sup> Overhead Door	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200	
Wood Wall FloodVENT <sup>®</sup>	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 = m<sup>2</sup>

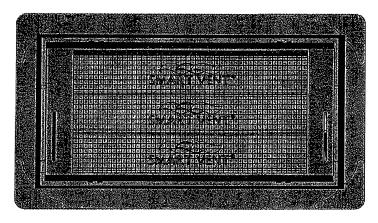


FIGURE 1-SMART VENT: MODEL 1540-510

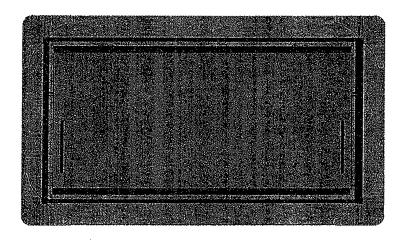


FIGURE 2-SMART VENT MODEL 1540-520

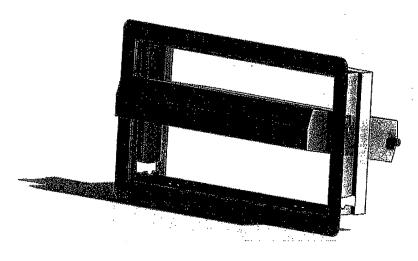


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN