### 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.

JUN 112020

SECTION A - PROPERTY INFORMATION			FOR INSU	FOR INSURANCE COMPANY US		
A1. Building Own SHC 107, LLC					Policy Nur	nber:
A2. Building Stree Box No. 209 104th Street	t Address (in	cluding Apt., Unit, Sui	te, and/or Bldg. N	o.) or P.O. Route	and Company	NAIC Number:
City			State		ZIP Code	
Stone Harbor				Jersey	08247	
A3. Property Des Block 104.03 Lots		ind Block Numbers, Ta	ax Parcel Number	, Legal Description	n, etc.)	
		ntial, Non-Residential,			VERSE CO. Co.	
A5. Latitude/Long	itude: Lat. N	39°02'54.78"	Long. W 074°45'	49.86" Horiz	ontal Datum: 🔲 NAD	1927 × NAD 1983
A6. Attach at leas	t 2 photograp	hs of the building if th	e Certificate is be	ng used to obtain	flood insurance.	
A7. Building Diagr	am Number	8				
A8. For a building	with a crawls	space or enclosure(s):				
a) Square foo	tage of craw	space or enclosure(s)		1676.00 sq ft		
b) Number of	permanent flo	ood openings in the cr	awlspace or enclo	sure(s) within 1.0	foot above adjacent gr	ade 9
		penings in A8.b				1
d) Engineered						
						•
A9. For a building			P2-22			
a) Square foo	tage of attach	ned garage	N/A	sq ft		
b) Number of	permanent flo	ood openings in the at	tached garage wit	hin 1.0 foot above	adjacent grade N/A	
c) Total net ar	ea of flood o	penings in A9.b	N/A	sq in		
d) Engineered	I flood openin	gs? ☐ Yes ☒ N	lo			
		CTION B - FLOOD	INSURANCE RA	TE MAP (FIRM)	INFORMATION	
		Community Number		inty Name		B3. State
Borough of Stone	Harbor #3453	523	Cape M	ay		New Jersey
4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/	B8. Flood Zone(s)	B9. Base Flood I	Elevation(s)
	_		Revised Dat	e		se Base Flood Depth)
4009C242	F	10-05-2017	10-05-2017	AE	8	
310. Indicate the		Base Flood Elevation Community Deter			ered in Item B9:	
			9: NGVD 192	9 × NAVD 198	8 Other/Source	
	ation datum u	used for BFE in Item B	o			-
FIS Profil				BRS) area or Othe	envise Protected Area	***************************************
FIS Profil	g located in a	a Coastal Barrier Resc			erwise Protected Area (	-

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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. 209 104th Street					Policy Number:		
City State Stone Harbor New		P Code 247	Company	NAIC !	Number		
SECTION C - BUILDING ELE	EVATION INFORMA	TION (SURVEY RE	QUIRED)				
C1. Building elevations are based on: Construction *A new Elevation Certificate will be required when co		uilding Under Constru	iction* [>	∏ Finisi	ned Construction		
C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), Complete Items C2.a~h below according to the build Benchmark Utilized: PID# DP1525	VE, V1–V30, V (with ling diagram specifie Vertical Datur	BFE), AR, AR/A, AR/ d in Item A7. In Puert n: El 9.73 NAVD 198	o Rico only	–A30, / v, enter	AR/AH, AR/AO. meters.		
Indicate elevation datum used for the elevations in ite  ☐ NGVD 1929 [X] NAVD 1988 ☐ Other/S		low.					
Datum used for building elevations must be the same		BFE.	Chaol	the me	easurement used.		
a) Top of bottom floor (including basement, crawlsp.	ace, or enclosure floo	or)		feet	meters		
b) Top of the next higher floor			11.2 ×	] feet	meters meters		
c) Bottom of the lowest horizontal structural membe	r (V Zones only)		N/A [>	] feet	meters meters		
d) Attached garage (top of slab)			N/A 🗵	feet	meters		
<ul> <li>e) Lowest elevation of machinery or equipment serv (Describe type of equipment and location in Com</li> </ul>	ricing the building ments)		11.0 ×	] feet	meters		
f) Lowest adjacent (finished) grade next to building	(LAG)		6.4	] feet	meters meters		
g) Highest adjacent (finished) grade next to building	(HAG)		<u>7.5</u> ×	feet	meters		
<ul> <li>h) Lowest adjacent grade at lowest elevation of dec structural support</li> </ul>	k or stairs, including		6.6 ×	] feet	meters meters		
SECTION D - SURVEYOR,	ENGINEER, OR AI	RCHITECT CERTIF	CATION				
This certification is to be signed and sealed by a land sur I certify that the information on this Certificate represents statement may be punishable by fine or imprisonment un	veyor, engineer, or a my best efforts to int der 18 U.S. Code, St	rchitect authorized by erpret the data availa ection 1001.	law to cer ble. I unde	tify elev	ration information. that any false		
Were latitude and longitude in Section A provided by a lic	ensed land surveyor	? ⊠Yes □No	⊠Ch	eck her	e if attachments.		
Certifier's Name Steven C Woodrow	License Number 27514						
Title NJ Professional Land Surveyor				p	lace		
Company Name Dante Guzzi engineering Associates					Seal		
Address 418 Stokes Road				}-	lere		
City Medford	State New Jersey	ZIP Code 08055					
Signature Law C. Winder	Date 05-26-2020	Telephone (609) 654-4440	Ext.				
Copy all pages of this Elevation Certificate and all attachme	ents for (1) community	official, (2) insurance	agent/comp	pany, ai	nd (3) building owner.		
Comments (including type of equipment and location, per The lowest equipment visible at the time of the Survey wa Model# 1540-510 certified to provide 200 SF of flood prov	as the HVAC unit loc	ated outside the build	ling. Vents	are "SI	MART VENT"		
DGEA Proj# C-19-216							

# **ELEVATION CERTIFICATE**

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IMPORTANT: In these spaces, copy the corresponding information fr	om Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P	O. Route and Box No.	Policy Number:
209 104th Street		
City State	ZIP Code	Company NAIC Number
Stone Harbor New Jersey	08247	
SECTION E BUILDING ELEVATION INFOR FOR ZONE AO AND ZONE	MATION (SURVEY NOT A (WITHOUT BFE)	REQUIRED)
For Zones AO and A (without BFE), complete items E1-E5. If the Certification complete Sections A, B, and C. For Items E1-E4, use natural grade, if available meters.	ate is intended to support a silable. Check the measure	a LOMA or LOMR-F request, ment used. In Puerto Rico only,
E1. Provide elevation information for the following and check the appropr the highest adjacent grade (HAG) and the lowest adjacent grade (LA a) Top of bottom floor (including basement,	iate boxes to show whethe G).	r the elevation is above or below
crawispace, or enclosure) is		rs 🔲 above or 🔲 below the HAG.
b) Top of bottom floor (including basement, crawlspace, or enclosure) is		rs 🔲 above or 🔲 below the LAG.
E2. For Building Diagrams 6–9 with permanent flood openings provided i		<del>-</del>
the next higher floor (elevation C2.b in the diagrams) of the building is	feet mete	
E3. Attached garage (top of slab) is		
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 the top of the floodplain management ordinance? Yes No Unknow	bottom floor elevated in ac	cordance with the community's
SECTION F - PROPERTY OWNER (OR OWNER'		
The property owner or owner's authorized representative who completes to community-issued BFE) or Zone AO must sign here. The statements in Section 2015	Sections A, B, and E for Zo ections A, B, and E are co	one A (without a FEMA-issued or rect to the best of my knowledge.
Property Owner or Owner's Authorized Representative's Name	. ,,,,	
Address Ci	ty St	ate ZIP Code
Signature Da	ate Te	lephone
Comments		
		ì

# **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corre			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, St 209 104th Street	uite, and/or Bldg. No.) or l	P.O. Route and Box No.	Policy Number:
City Stone Harbor	State New Jersey	ZIP Code 08247	Company NAIC Number
SECTIO	N G - COMMUNITY INF	ORMATION (OPTIONAL)	
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	Certificate. Complete the ter meters.	e applicable item(s) and sig	n below. Check the measurement
G1. The information in Section C was takengineer, or architect who is authorized at a in the Comments area below.)	en from other documenta ed by law to certify elevat	tion that has been signed a tion information. (Indicete th	and sealed by a licensed surveyor, ne source and date of the elevation
G2. A community official completed Secti or Zone AO.	on E for a building located	d în Zone A (without a FEM	A-issued or community-issued BFE)
G3. The following information (Items G4-	G10) is provided for com	munity floodplain managem	nent purposes.
G4. Permit Number	G5. Date Permit Issued	1	Date Certificate of Compliance/Occupancy Issued
19-13461	10/22/19	6	19 2020
G7. This permit has been issued for:	New Construction 🔲 S	ubstantial Improvement	,
G8. Elevation of as-built lowest floor (including of the building:	basement)	2 Ig feet	t ☐ meters Datum <u>/                                   </u>
G9. BFE or (in Zone AO) depth of flooding at t	he building site: AE	<u>8</u>	meters Datum NAUD 1988
G10. Community's design flood elevation:	Hyper of (11.	🔀 fee	t meters Datum NAVD1988
Local Official's Name		Title	. 01 11
Kaymond Poudrier Community Name	(onstruc	tion Official / F	Flood Plain Manager
Borough of Stone Harbo	609	7-368-6814	
Signature /	ِ ر	Date 19/20 20	
Comments (including type of equipment and loc	ation, per C2(e), if application	able)	
, 5,1			
		•	
			Check here if attachments.

### **BUILDING PHOTOGRAPHS**

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**ELEVATION CERTIFICATE** 

See Instructions for Item A6.

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

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Stone Harbor	New Jersey	08247		

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 & RIGHT SIDE VIEW (5/21/2020)

Clear Photo One

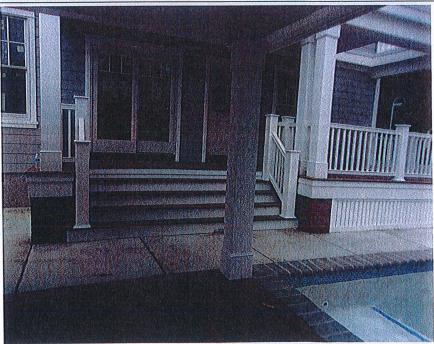


Photo Two

Photo Two Caption REAR VIEW (5/21/2020)

Clear Photo Two

### **BUILDING PHOTOGRAPHS**

## **ELEVATION CERTIFICATE**

Continuation Page

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Stone Harbor	New Jersey	08247		

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.

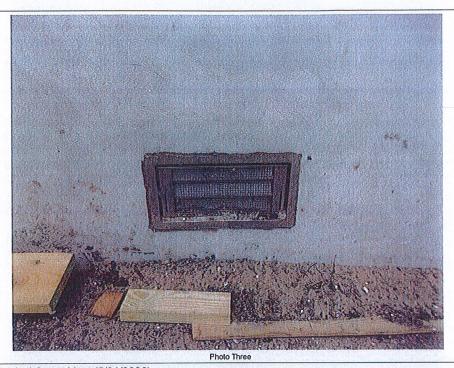


Photo Three Caption Typical Smart Vent (5/21/2020)

Clear Photo Three



Photo Four



# 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>

#### 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 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.

#### 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



<sup>&</sup>lt;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.

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 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<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

- 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	MODEL SIZE (in.)	COVERAGE (sq. ft.)	
FloodVENT®	1540-520	15 <sup>3</sup> / <sub>4</sub> " × 7 <sup>3</sup> / <sub>4</sub> "		
SmartVENT®	1540-510	15 <sup>3</sup> / <sub>4</sub> " × 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> /4"	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® Stacker	1540-521	16" X 16"	400	

For SI: 1 inch = 25.4 mm; 1 square foot = m2

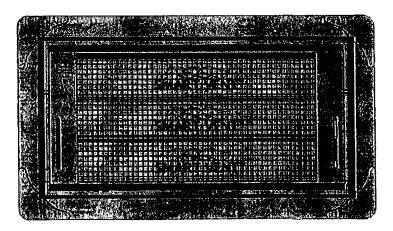


FIGURE 1-SMART VENT: MODEL 1540-510