# U.S. DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency National Flood Insurance Program



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

Important: Follow the instructions on pages 1-9.730R

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A - PRO	PERTY INFORM	IATION		FOR INSURA	NCE COMPANY USE
A1. Building Owner's Name			Policy Number	er:	
Gerard & Darlene Eberz					
<ul><li>A2. Building Street Address (including Apt., U Box No.</li><li>230 108th Street</li></ul>	Jnit, Suite, and/or	Bldg. No.) or P.O.	Route and	Company NA	IC Number:
City	***************************************	State		ZIP Code	
Stone Harbor		New Jersey		08247	-
A3. Property Description (Lot and Block Num Block 107.03 Lots 67.02, 69 & 71	nbers, Tax Parcel	Number, Legal De	escription, etc.)		
A4. Building Use (e.g., Residential, Non-Res	idential, Addition,	Accessory, etc.)	Residential		
A5. Latitude/Longitude: Lat. N 39°02'45.54"				Datum: NAD 19	027 × NAD 1983
A6. Attach at least 2 photographs of the build				nsurance.	
A7. Building Diagram Number 8					
A8. For a building with a crawlspace or enclo	osure(s):				
Square footage of crawlspace or enc.		1595	00 sq ft		
b) Number of permanent flood openings			-	hove adjacent grad	de 8
			7101111 7.0 1001 0	bove adjacent grav	
c) Total net area of flood openings in A8		000.00 sq III			
d) Engineered flood openings?	es No				
A9. For a building with an attached garage:					
a) Square footage of attached garage _		N/A sq ft			
b) Number of permanent flood openings	in the attached g	arage within 1.0 fo	oot above adjac	cent grade N/A	
c) Total net area of flood openings in AS	0.b	N/A sq in			
d) Engineered flood openings?					
d) Engineered nood openings.	CO [A] 110				
SECTION B -	FLOOD INSURA	NCE RATE MAP	(FIRM) INFO	RMATION	
B1. NFIP Community Name & Community N	umber	B2. County Nam	e		B3. State
Borough of Stone Harbor #345323		Cape May		i.	New Jersey
B4. Map/Panel B5. Suffix B6. FIRM Date	Effe		. Flood ne(s)	B9. Base Flood El (Zone AO, use	evation(s) e Base Flood Depth)
34009C242 F 10-05-2017		CONTRACTOR CONTRACTOR OF THE PARTY OF THE PA		8	
B10. Indicate the source of the Base Flood	Elevation (BFE) d	ata or base flood	depth entered	n Item B9:	
	,				
FIS Profile X FIRM Commun	nity Determined	Other/Source:			
				Other/Source:	
FIS Profile X FIRM Commun	in Item B9: N	IGVD 1929 ⊠ N	NAVD 1988 [	Other/Source:	
FIS Profile  FIRM  Commun	in Item B9: N	IGVD 1929 ⊠ N	NAVD 1988 [	Other/Source:	

OMB No. 1660-0008 Expiration Date: November 30, 2022 **ELEVATION CERTIFICATE** FOR INSURANCE COMPANY USE 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. 230 108th Street			Policy Number:
City Stone Harbor	State ZIP New Jersey 0824		Company NAIC Number
SECTION C - BUIL	DING ELEVATION INFORMAT	TION (SURVEY RE	QUIRED)
C1. Building elevations are based on:  *A new Elevation Certificate will be requir  C2. Elevations – Zones A1–A30, AE, AH, A (Complete Items C2.a–h below according Benchmark Utilized: PID# DP1525  Indicate elevation datum used for the elevation datum used for the elevation used for building elevations must be a) Top of bottom floor (including basements) Top of the next higher floor  c) Bottom of the lowest horizontal structured Attached garage (top of slab)  e) Lowest elevation of machinery or equal (Describe type of equipment and location).	Construction Drawings*	ding Under Constructing is complete. FE), AR, AR/A, AR/A in Item A7. In Puerto NAVD 1988 w. BFE.	Check the measurement used.  7.1
g) Highest adjacent (finished) grade nex			7.0 X feet meters
h) Lowest adjacent grade at lowest elev- structural support	ation of deck or stairs, including	***************************************	6.5 X feet meters
	RVEYOR, ENGINEER, OR AR		
This certification is to be signed and sealed be a certify that the information on this Certificate statement may be punishable by fine or imprise.  Were latitude and longitude in Section A prov	represents my best efforts to inte sonment under 18 U.S. Code, Se	erpret the data availa ction 1001. —	y law to certify elevation information.  able. I understand that any false   Check here if attachments.
Certifier's Name Steven C. Woodrow Title Professional Land Surveyor	License Number 27514		Place
Company Name Dante Guzzi engineering Associates			Seal
Address 418 Stokes Road			Here
City Medford	State New Jersey	ZIP Code 08055	
Signature Star C Working	Date 06-29-2020	Telephone (609) 654-4440	Ext.
Copy all pages of this Elevation Certificate and	all attachments for (1) community	official, (2) insurance	agent/company, and (3) building owner.
Comments (including type of equipment and The lowest equipment visible at the time of the Madel# 1540-510 certified to provide 200 SF	e Survey was The HVAC unit location	ated outside the buil	ding. All vents are "SMART VENT"
DGEA Proj# C-19-168			

# **ELEVATION CERTIFICATE**

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

MPORTANT: in these spaces, copy the correspon	ding information from	Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, at 230–108th Street			Policy Number:
City Stone Harbor	State New Jersey	ZIP Code 08247	Company NAIC Number
SECTION E – BUILDING E FOR ZO	LEVATION INFORMA NE AO AND ZONE A	ATION (SURVEY NOT (WITHOUT BFE)	REQUIRED)
or Zones AO and A (without BFE), complete Items to complete Sections A, B,and C. For Items E1–E4, use enter meters.	E1-E5. If the Certificate natural grade, if availa	is intended to support a ble. Check the measure	a LOMA or LOMR-F request, ement used. In Puerto Rico only,
<ol> <li>Provide elevation information for the following at the highest adjacent grade (HAG) and the lowes</li> </ol>	nd check the appropriate at adjacent grade (LAG)	e boxes to show whethe	er the elevation is above or below
<ul> <li>Top of bottom floor (including basement, crawlspace, or enclosure) is</li> </ul>		feet mete	ars above or below the HAG.
b) Top of bottom floor (including basement, crawlspace, or enclosure) is		feet _ mete	
2. For Building Diagrams 6–9 with permanent floor	f openings provided in S	Section A Items 8 and/o	r 9 (see pages 1–2 of Instructions).
the next higher floor (elevation C2.b in the diagrams) of the building is			
E3. Attached garage (top of slab) is		feet _ mete	ers above or below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is			ers above or below the HAG.
E5. Zone AO only: If no flood depth number is availa floodplain management ordinance?	able, is the top of the bo	ottom floor elevated in a The local official must	ccordance with the community's tertify this information in Section G.
SECTION F - PROPERTY O	WHER OR OWNER'S	DEDDECENTATIVE)	PERTIFICATION
community-issued BFE) or Zone AO must sign here Property Owner or Owner's Authorized Representation Address			State ZIP Code
Signature	Date	e T	elephone
Comments			
			Check here if attachments

# **ELEVATION CERTIFICATE**

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

MPORTANT: In these spaces, copy the corre	sponding information f	rom Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Su 230 108th Street	ite, and/or Bldg. No.) or f	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 si	gn below. Check the measurement
G1. The information in Section C was tak engineer, or architect who is authoriz data in the Comments area below.)	ed by law to certify eleva	tion information. (Indicate	the source and date of the elevation
or Zone AO.			MA-issued or community-issued BFE)
G3. The following information (Items G4-	-G10) is provided for com	munity floodplain manage	ement purposes.
G4. Permit Number 19- 13 524	G5. Date Permit Issue	d G6	Date Certificate of Compliance/Occupancy Issued
[1] [3]0-1	11/05/11		110/1000
G7. This permit has been issued for:	New Construction 🔲	Substantial Improvement	
G8. Elevation of as-built lowest floor (includin of the building:	g basement)	<u>11. 2</u> \(\mathbb{Z}\)	eet meters Datum NAVD 88
G9. BFE or (in Zone AO) depth of flooding at	the building site: AB		eet meters Datum MAVD 88
G10. Community's design flood elevation:	Higher of BFE+	2 or 11 \	eet  meters Datum
Local Official's Name  Raymond Pordner  Community Name	Constructi	Title  To Official / Fla	od Plain Manage-
Borough of Stone Harbor	- (60	Telephone ( 09) 368-6814	
Signature M		Date // /ルルン	
Comments (including type of equipment and lo	ocation, per C2(e), if appli	icable)	
			Check here if attachments.

### **BUILDING PHOTOGRAPHS**

# **ELEVATION CERTIFICATE**

See Instructions for Item A6.

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IMPORTANT: In these spaces, copy the corresponding information from Section A.FOR INSURANCE COMPANY USEBuilding Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.Policy Number:230 108th StreetStateZIP CodeCompany NAIC NumberStone HarborNew Jersey08247

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 VIEW (06/19/2020)

Clear Photo One



Photo Two Caption REAR VIEW (06/19/2020)

Clear Photo Two

# **BUILDING PHOTOGRAPHS**

# **ELEVATION CERTIFICATE**

Continuation Page

OMB No. 1660-0008

Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the	e 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. 230 108th Street		Policy Number:	
City	State	ZIP Code	Company NAIC Number
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

Photo Three Caption RIGHT SIDE VIEW (06/19/2020)

Clear Photo Three



Photo Four

Photo Four Caption LEFT SIDE VIEW (06/19/2020)

Clear 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>

<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-2-inch (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 m<sup>2</sup>) of enclosed area, except that the SmartVENT<sup>®</sup> Stacking Model #1540-511 and FloodVENT<sup>®</sup> 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<sup>®</sup> 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 <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® Overhead Door	1540-524	$15^3/_4$ " $\times$ $7^3/_4$ "	200
SmartVENT® Overhead Door	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent® Stacker	1540-521	16" X 16"	400

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

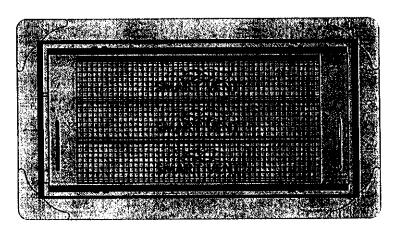


FIGURE 1-SMART VENT: MODEL 1540-510