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

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

APK 40 /11/1

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.

						TO DIE TO DE LA COLUMNIA DEL COLUMNIA DEL COLUMNIA DE LA COLUMNIA	DALLOS COLLONINALIOS
SECTION A – PROPERTY INFORMATION					FOR INSURANCE COMPANY USE		
A1. Building Owner's Name Policy Number:  P. Michael and Mary Jane Walker					ber:		
	-			- Did- N- V	- DO Doute on		
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Company NAIC Number: 425 99th Street					IAIC Number:		
City				State		ZIP Code	
Stone Harbor							
A3. Property Desc Block 99.05 Lots		and Block Numbers, Ta	ax Parce	Number, Le	gal Description, e	tc.)	
A4. Building Use (	e.g., Resider	ntial, Non-Residential,	Addition	, Accessory,	etc.) Resident	ial	
A5. Latitude/Longi	A5. Latitude/Longitude: Lat. N 39°03'14.56" Long. W 074°45'55.37" Horizontal Datum: NAD 1927 X NAD 1983						
A6. Attach at least	2 photograp	hs of the building if th	e Certific	ate is being	used to obtain floo	od insurance.	
A7. Building Diagr	am Number	8					
A8. For a building	with a crawls	space or enclosure(s):					
a) Square foo	tage of craw	Ispace or enclosure(s)			1395.00 sq ft		
b) Number of	permanent flo	ood openings in the cr	awlspac	e or enclosur	e(s) within 1.0 foo	t above adjacent gra	ade 7
c) Total net ar	ea of flood o	penings in A8.b	1	1400.00 sq ir	1		
d) Engineered	I flood openir	ngs? 🛛 Yes 🗌 N	No				
A9. For a building v							
				N/A sq fi			
a) Square foot	-						
		ood openings in the at	tached g	D-10.70-1		jacent grade N/A	
c) Total net are	ea of flood of	penings in A9.b		N/A sq	in		
d) Engineered	flood openin	gs? ☐ Yes ⊠ N	10				
	SF	CTION B - FLOOD	INSURA	NCE RATE	MAP (FIRM) INF	ORMATION	
R1 NEID Commun		Community Number		B2. County		Ortina (Troit	B3. State
Borough of Stone H				Cape May	Ivaine		New Jersey
		I	I		Γ	T	
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Effe	RM Panel ective/	B8. Flood Zone(s)	B9. Base Flood E (Zone AO, use	levation(s) e Base Flood Depth)
34009C242	F	10-05-2017	Rev 10-05-2	vised Date 2017	AE	9	* *
B10. Indicate the s	ource of the	Base Flood Elevation	(BFE) da	ata or base flo	ood depth entered	in Item B9:	
FIS Profile	≥ X FIRM	Community Determ	mined [	Other/Sou	rce:		
B11. Indicate eleva	ition datum u	sed for BFE in Item B	9: 🗌 N	GVD 1929	× NAVD 1988	Other/Source:	
B12. Is the building	located in a	Coastal Barrier Reso	urces Sy	stem (CBRS)	area or Otherwis	se Protected Area (C	PA)? ☐ Yes ☒ No
Designation [			CBRS	□ OPA			

# **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corresponding information from Section A.				FOR INSURANCE COMPANY USE			
425 99th Street				Policy Number:			
City State ZIP Code Stone Harbor New Jersey					Company NAIC Number		
SECTION C - BUILDING E	LEVATION INFORM	MATION (SURVEY RE	QUIRE	ED)			
<ul> <li>C1. Building elevations are based on: Construction Drawings* Building Under Construction* Finished Construction *A new Elevation Certificate will be required when construction of the building is complete.</li> <li>C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters. Benchmark Utilized: PID# DP1523</li> <li>Vertical Datum: NAVD 1988</li> </ul>							
Indicate elevation datum used for the elevations in	items a) through h) b	pelow.					
☐ NGVD 1929 ☑ NAVD 1988 ☐ Other		- DEE					
Datum used for building elevations must be the sar	ne as that used for tr	ie BFE.	Che	Check the measurement used.			
a) Top of bottom floor (including basement, crawls	pace, or enclosure fl	oor)	6.2	✓ feet	meters meters		
b) Top of the next higher floor			11.2	× feet	meters meters		
c) Bottom of the lowest horizontal structural memb	er (V Zones only)		N/A	× feet	meters meters		
d) Attached garage (top of slab)	• 1500 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				meters meters		
<ul> <li>e) Lowest elevation of machinery or equipment se (Describe type of equipment and location in Cor</li> </ul>	rvicing the building mments)		11.1	⊠ feet	meters		
f) Lowest adjacent (finished) grade next to building	g (LAG)		5.3	× feet	meters meters		
g) Highest adjacent (finished) grade next to building	ig (HAG)		6.2	× feet	meters		
h) Lowest adjacent grade at lowest elevation of de structural support	ck or stairs, including		5.5		meters		
SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION							
This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.							
Were latitude and longitude in Section A provided by a l		V-2-12	$\times$	Check here	e if attachments.		
Certifier's Name Steven C. Woodrow	License Number 27514						
Title Professional Land Surveyor				PI	ace		
Company Name	Seal						
Dante Guzzi engineering Associates							
Address 418 Stokes Road					ere		
City Medford	State New Jersey	ZIP Code 08055					
Signature Steven C. Woodlaw	Date 04-27-2020	Telephone (609) 654-4440	Ext.				
Copy all pages of this Elevation Certificate and all attachme	ents for (1) community	y official, (2) insurance a	gent/co	mpany, and	d (3) building owner.		
Comments (including type of equipment and location, per C2(e), if applicable) All vents are "SMART VENT" Model# 1540-510 certified to provide 200 SF of flood protection each. The lowest equipment visible at the time of the Survey was the HVAC unit located outside the building.							
DGEA Proj# C-18-471							

# **ELEVATION CERTIFICATE**

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Building Street Address (including Apt., Unit, Suite, and 425 99th Street	Policy Number:					
1 7	State New Jersey	ZIP Code	Company NAIC Number			
SECTION E – BUILDING ELE FOR ZONE	EVATION INFO	RMATION (SURVEY NO E A (WITHOUT BFE)	T REQUIRED)			
	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,					
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,		[] feet [] mete	ers above or below the HAG.			
crawlspace, or enclosure) is		feet mete				
E2. For Building Diagrams 6–9 with permanent flood op the next higher floor (elevation C2.b in the diagrams) of the building is	Dénings provided	in Section A Items 8 and/o				
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 available floodplain management ordinance?   Yes	e, is the top of the No	bottom floor elevated in a wn. The local official must	ccordance with the community's certify this information in Section G.			
SECTION F - PROPERTY OWN	ER (OR OWNER	C'S REPRESENTATIVE) C	ERTIFICATION			
The property owner or owner's authorized representative community-issued BFE) or Zone AO must sign here. The	e who completes e statements in S	Sections A, B, and E for Z Sections A, B, and E are co	one A (without a FEMA-issued or rrect to the best of my knowledge.			
Property Owner or Owner's Authorized Representative's	Name					
Address	C	ity S	tate ZIP Code			
Signature	D	ate Te	elephone			
Comments		<del> </del>				

# **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corn	FOR INSURANCE COMPANY USE						
Building Street Address (including Apt., Unit, S 425 99th Street	Policy Number:						
City	ZIP Code	Company NAIC Number					
Stone Harbor	State New Jersey	ZIF OUG	Company NATO Number				
SECTION	ON G - COMMUNITY I	INFORMATION (OPTIONAL)					
Sections A, B, C (or E), and G of this Elevation	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 tak engineer, or architect who is authoriz data in the Comments area below.)							
G2. A community official completed Section Zone AO.	ion E for a building loca	ated in Zone A (without a FEM/	A-issued or community-issued BFE)				
G3. The following information (Items G4-	-G10) is provided for co	ommunity floodplain manageme	ent purposes.				
G4. Permit Number	G5. Date Permit Issu	C	Date Certificate of Compliance/Occupancy Issued				
20-195	06/23/20	020	1/27/21				
G7. This permit has been issued for:	☑ New Construction [	] Substantial Improvement	,				
G8. Elevation of as-built lowest floor (including of the building:	g basement)	, 2 💢 feet	☐ meters Datum <u>MAUD88</u>				
G9. BFE or (in Zone AO) depth of flooding at t	<b>g</b>	·	meters Datum NAVD 88				
G10. Community's design flood elevation:	G10. Community's design flood elevation: Higher of BFE+2 or 11 X feet _ meters Datum NAVD 88						
Local Official's Name  Title  Raymond Poudrier (onstruction Official / Flood Plain Manager  Community Name  Telephone  (609) 368-6814							
Raymond Poudrier Community Name Stone Harbor	(609)	768-6814					
Signature Oli-	4	Date (/27/21					
Comments (including type of equipment and loc	cation, per C2(e), if app	olicable)					
			Check here if attachments.				

### BUILDING PHOTOGRAPHS

See Instructions for Item A6.

OMB No. 1660-0008

Expiration Date: November 30, 2022

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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.

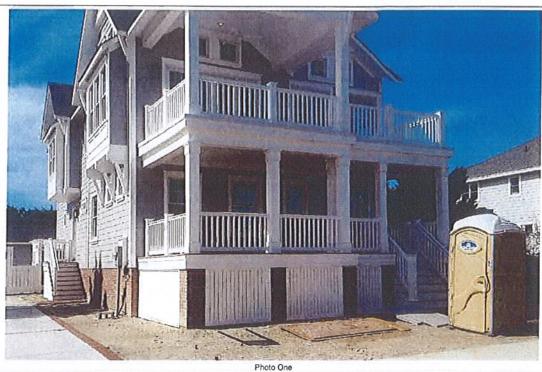


Photo One Caption FRONT VIEW (03/21/2021)

**ELEVATION CERTIFICATE** 

Clear Photo One



Photo Two Caption REAR VIEW (03/21/2021)

Clear Photo Two

# **BUILDING PHOTOGRAPHS**

# **ELEVATION CERTIFICATE**

Continuation Page

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

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Building Street Address (including 425 99th Street	Apt., Unit, Suite, and/or Bldg. No.)	or P.O. Route and Box No.	Policy Number:
City	State	ZIP Code	Company NAIC Number
Stone Harbor	New Jersey		

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.

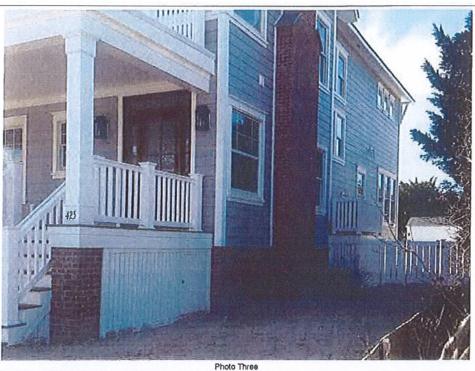


Photo Three Caption RIGHT SIDE VIEW (03/21/2021)

Clear Photo Three



Photo Four

Photo Four Caption LEFT SIDE VIEW (03/21/2021)

Clear Photo Four



# **ICC-ES Evaluation Report**

**ESR-2074** 

Reissued February 2021
This report is subject to renewal February 2023.

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>1</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

