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

JUL 14 7972

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

# REVATION CERTIFICATE 7/19/3 2 754 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	INFOR	MATION		FOR INSUR	RANCE COMPANY USE
A1. Building Owne JAV Investments			7			Policy Num	ber:
A2. Building Street Box No. 216 90th Street	Address (in	cluding Apt., Unit, Suit	ie, and/o	r Bldg. No.) o	r P.O. Route and	Company N	AIC Number:
City Stone Harbor				State New Jers	-	ZIP Code 08247	
A3. Property Desc Block 89.03 Lots 79		ind Block Numbers, Ta	x Parcel	Number, Leg	gal Description, e	tc.)	
A4. Building Use (	e.g., Resider	ntial, Non-Residential,	Addition	, Accessory, e	etc.) Resident	ial	
A5. Latitude/Longi	tude: Lat. N	39°03'28.11 <b>"</b>	Long. W	/ 074°45'20.7	6" Herizont	al Datum:  NAD 1	1927 × NAD 1983
A6. Attach at least	2 photograp	hs of the building if the	e Certific	ate is being u	 Ised to obtain floo	od insurance.	···-
A7. Building Diagra	arn Number	8					
A8. For a building	with a crawls	space or enclosure(s):					
a) Square foo	age of crawl	lspace or enclosure(s)		1	369.00 sq ft		
b) Number of p	ermanent flo	ood openings in the cr	awispace	or enclosure	e(s) within 1.0 foc	ot above adjacent gra	ıde <u>8</u>
c) Total net are	ea of flood op	penings in A8.b	1	600.00 sq in			-
d) Engineered	flood openir	ngs? 🛛 Yes 🗌 N	<b>1</b> 0				
A9. For a building v	vith an attach	ned garage:					
a) Square foot	age of attach	ned garage		N/A sq ft			
b) Number of p	ermanent flo	ood openings in the att	tached g	arage within 1	1.0 foot above ad	jacent grade N/A	_
c) Total net are	a of flood op	penings in A9.b		N/A sq	in	-	
d) Engineered	flood openin	gs? Yes X N	10				
	SE	CTION B - FLOOD I	NSURA	NCE RATE	MAP (FIRM) INI	FORMATION	
B1. NFIP Communi		Community Number		B2. County I		- W. (())	B3. State
Borough of Stone H	larbor #3453	23		Cape May			New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Effe	RM Panel ective/	B8. Flood Zone(s)	B9. Base Flood E	i levation(s) ∋ Base Flood Depth)
34009C242	F	10-05-2017	10-05-2	vised Date 2017	AE	8	
B10. Indicate the s	ource of the	Base Flood Elevation	(BFE) de	ata or base flo	ood depth entered	d in Item B9:	
FIS Profile	∷ ⊠ FIRM	Community Determ	mined [	] Other/Sour	rce:		
B11. Indicate eleva	ition datum u	sed for BFE in Item B	9: 🔲 NO	GVD 1929 [	☑ NAVD 1988	Other/Source:	
B12. Is the building	located in a	Coastal Barrier Reso	urces Sy	stem (CBRS)	area or Otherwi	se Protected Area (C	PA)? ☐ Yes ⊠ No
Designation D	ate:		CBRS	OPA			_

# **ELEVATION CERTIFICATE**

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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. 216 90th Street	Policy Number:
City State ZIP Code Stone Harbor New Jersey 08247	Company NAIC Number
SECTION C - BUILDING ELEVATION INFORMATION (SURVEY R	EQUIRED)
C1. Building elevations are based on: Construction Drawings* Building Under Constru	uction* 🗵 Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.	
C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/Complete Items C2.a—h below according to the building diagram specified in Item A7. In Puerl Benchmark Utilized: PID# DP1521 Vertical Datum: NAVD 1988	/AE, AR/A1–A30, AR/AH, AR/AO. to Rico only, enter meters.
Indicate elevation datum used for the elevations in items a) through h) below.	
☐ NGVD 1929 ☑ NAVD 1988 ☐ Other/Source:	
Datum used for building elevations must be the same as that used for the BFE.	Check the measurement used.
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	6.9 🗵 feet 🗌 meters
b) Top of the next higher floor	11.2 X feet  meters
c) Bottom of the lowest horizontal structural member (V Zones only)	N/A ⊠ feet ☐ meters
d) Attached garage (top of slab)	N/A    ▼ feet   meters
e) Lowest elevation of machinery or equipment servicing the building     (Describe type of equipment and location in Comments)	11.2
f) Lowest adjacent (finished) grade next to building (LAG)	6.2 X feet  meters
g) Highest adjacent (finished) grade next to building (HAG)	6.8 🗵 feet 🗌 meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	6.2 X feet meters
SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIF	CATION
This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized be a certify that the information on this Certificate represents my best efforts to interpret the data available statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.	y law to certify elevation information. able. I understand that any false
Were tatitude and longitude in Section A provided by a licensed land surveyor? ⊠Yes ☐ No	Check here if attachments.
Certifier's Name License Number Robert K. Sanchez 43294	
Title	
Professional Land Surveyor	Place
Company Name CME Associates	Seal
Address	Here
203 South Main Street	
City State ZIP Code Cape May Court House New Jersey 08210	
Signature Date Telephone (609) 465-3333	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 location, per C2(e), if applicable) The lowest equipment visible at the time of the Survey was HVAC Unit. The foundation/crawlspace #1540-510.	e vents are Smart Vents Model
Proj#M2100025.01	

# **ELEVATION CERTIFICATE**

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IMPORTA	NT: In these spaces, copy the correspon	ding information fro	om Section A.		FOR INSURANCE COMPANY USE
216 90th	itreet Address (including Apt., Unit, Suite, a Street	nd/or Bldg. No.) or P.	O. Route and Box I	No.	Policy Number:
City Stone Har	bor	State New Jersey	ZIP Code 08247		Company NAIC Number
	SECTION E – BUILDING E FOR ZOI	LEVATION INFORI	MATION (SURVEY A (WITHOUT BFE	Y NOT	REQUIRED)
For Zones complete enter met	s AO and A (without BFE), complete Items E Sections A, B,and C. For Items E1–E4, use ers.	E1–E5. If the Certifica natural grade, if avai	te is intended to su lable. Check the m	pport a	LOMA or LOMR-F request, ment used. In Puerto Rico only,
the h	de elevation information for the following ar ighest adjacent grade (HAG) and the lowes	nd check the appropri t adjacent grade (LAC	ate boxes to show t 3).	whether	r the elevation is above or below
CI	op of bottom floor (including basement, rawlspace, or enclosure) is op of bottom floor (including basement,		feet [	] meter	s 🔲 above or 🔲 below the HAG.
CI	awispace, or enclosure) is			] meter	<del></del>
the n	tuilding Diagrams 69 with permanent flood ext higher floor (elevation C2.b in iagrams) of the building is	openings provided in		_	
	hed garage (top of slab) is			] meter: ] meter	
E4. Top o	of platform of machinery and/or equipment cing the building is			] meter	
E5. Zone	AO only: If no flood depth number is availa plain management ordinance?	ble, is the top of the I	oottom floor elevate	- ed in acc	cordance with the community's
	SECTION F - PROPERTY O	WNER (OR OWNER'	S REPRESENTATI	VE) CE	RTIFICATION
The prope communit	erty owner or owner's authorized representa y-issued BFE) or Zone AO must sign here.	itive who completes S The statements in Se	Sections A, B, and E ections A, B, and E	for Zo are con	ne A (without a FEMA-issued or rect to the best of my knowledge.
Property (	Owner or Owner's Authorized Representation	ve's Name			
Address		Cit	у	Sta	ate ZIP Code
Signature	•	Da	te	Te	lephone
Comment	S				
					i
					Check here if attachments.

# **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corre	sponding information from Section	on A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, St 216 90th Street	uite, and/or Bldg. No.) or P.O. Route	and Box No.	Policy Number:
City Stone Harbor	State ZIP Co New Jersey 08247		Company NAIC Number
SECTION	ON G - COMMUNITY INFORMATIO	N (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 applicable	y's floodplain ma e item(s) and sign	nagement ordinance can complete helow. Check the measurement
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.	on E for a building located in Zone A	(without a FEM	A-issued or community-issued BFE)
G3. The following information (Items G4-	G10) is provided for community floo	dplain managem	ent purposes.
G4. Permit Number	G5. Date Permit Issued		Date Certificate of Compliance/Occupancy Issued
21-743	07/19/21		11/4/2022
G7. This permit has been issued for:	New Construction  Substantial	Improvement	
G8. Elevation of as-built lowest floor (including of the building:	g basement) 11.2	K feel	meters Datum NAVD 88
G9. BFE or (in Zone AO) depth of flooding at	the building site: AE 8	🄀 feet	meters Datum NAVD 88
G10. Community's design flood elevation:	Hydrof BFE+2 or	// 🔀 fee	meters Datum NAVD (8
Local Official's Name Raymond Poudrier	Title Construction Official Telephone	/Flood Pl	ain Manager
Community Name Stone Harbor	Telephone (609) 368 - 6814		
Signature All	7/14/2)		
Comments (including type of equipment and loc	cation, per C2(e), if applicable)		
			Check here if attachments.

#### **BUILDING PHOTOGRAPHS**

See Instructions for Item A6.

#### OMB No. 1660-0008

Expiration Date: November 30, 2022

[MPORTANT: In these spaces, co	by the corresponding information	from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including A 216 90th 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	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.

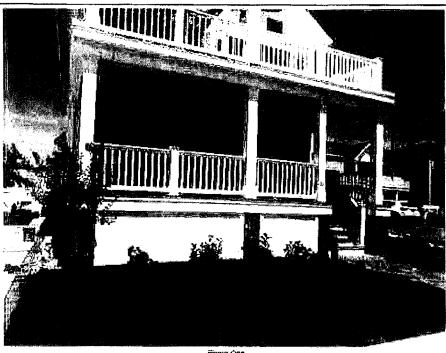


Photo One

Photo One Caption FRONT VIEW (6/30/2022)

**ELEVATION CERTIFICATE** 

Clear Photo One



Photo Two

Photo Two Caption REAR VIEW (6/30/2022)

Clear Photo Two

## **BUILDING PHOTOGRAPHS**

## **ELEVATION CERTIFICATE**

**Continuation Page** 

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

IMPORTANT: In these spaces, copy	the corresponding information	from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Ap 216 90th Street			Policy Number:
City Stone Harbor	State New Jersey	ZIP Code 08247	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.

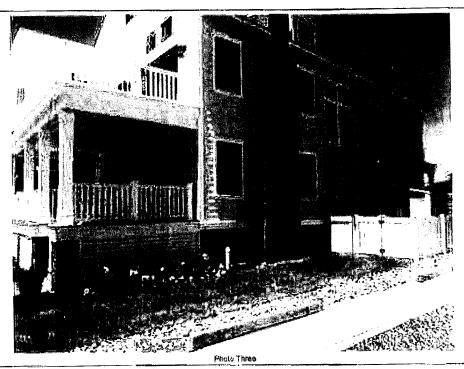


Photo Three Caption RIGHT SIDE VIEW (6/30/2022)

Clear Photo Three

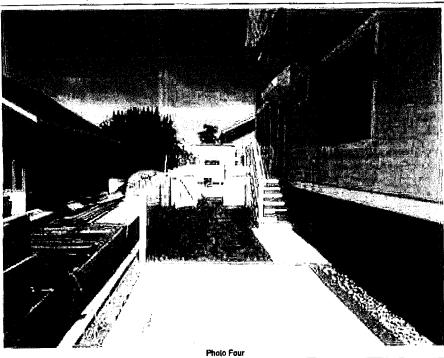


Photo Four Caption LEFT SIDE VIEW (6/30/2022)

Clear Photo Four



# **ICC-ES Evaluation Report**

# **ESR-2074**

Reissued February 2021 Revised April 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:

- 2021, 2018, 2015, 2012, 2009 and 2006 International Building Code® (IBC)
- 2021, 2018, 2015, 2012, 2009 and 2006 International Residential Code® (IRC)
- 2021, 2018 International Energy Conservation Code® (IECC)
- 2013 Abu Dhabi International Building Code (ADIBC)†

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® 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/SE] 24-05 (2012, 2009, 2008 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 described 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 FioodVENT® 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.



- wi 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 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 teakage 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 February 2021).
- 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 described 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> " X 7 <sup>3</sup> / <sub>4</sub> "	200	
SmartVENT®	1540-510	15³/₄" X 7³/₄"	200	
FloodVENT® Overhead Door	1540-524	15³/4" X 7³/4"	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 83/4"	200	
SmartVENT® 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

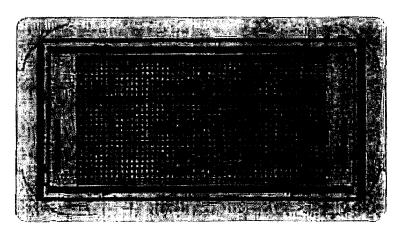


FIGURE 1-SMART VENT: MODEL 1540-510