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.

				FOR INSUF	RANCE COMPANY USE		
A1. Building Owner's Name Steve Fleischman				Policy Num	ber:		
	Address (inc	luding Ant Unit Cuito	and/a	" Dida Na) a " D O	Davida and		· · · · · · · · · · · · · · · · · · ·
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Company NAIC Number:					AIC Number:		
#105 South Essex	Avenue						
City CITY OF MAR	GATE			State New Jersey		ZIP Code 08402	
A3. Property Desc	ription (Lot ar	nd Block Numbers, Tax	Parce	l Number, Legal De	scription, etc.)		
Block 5.01 Lot 3							
A4. Building Use (A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL						
A5. Latitude/Longit	ude: Lat. <u>39</u>	.3293 L	_ong. <u>-7</u>	74.4964	Horizontal Datun	n: 🔲 NAD 1	927 🗵 NAD 1983
A6. Attach at least	2 photograph	ns of the building if the	Certific	ate is being used to	obtain flood insura	ance.	
A7. Building Diagra	m Number	7					
A8. For a building v	with a crawlsp	pace or enclosure(s):					
a) Square foot	age of crawls	pace or enclosure(s)		1,122 sq ft			•
b) Number of p	permanent flo	od openings in the cra	wlspac	e or enclosure(s) w	ithin 1.0 foot above	adjacent gra	ade 6
c) Total net are	ea of flood op	enings in A8.b 1,20	00 s	sq in			
d) Engineered	flood opening	gs? 🗵 Yes 🗌 No)				
A9. For a building v	vith an attach	ed darage.					
_				sa ft			
a) Square footage of attached garage 0 sq ft							
. · · ·	b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade0						
· ·	c) Total net area of flood openings in A9.b sq in						
d) Engineered flood openings? Yes No							
SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION							
B1. NFIP Communi				B2. County Name	(,		B3. State
CITY OF MARGAT	•	•		ATLANTIC COUN	TY		New Jersey
B4. Map/Panel	B5. Suffix	B6. FIRM Index	B7 F	IRM Panel	B8. Flood Zone(s	B9 Bas	lse Flood Elevation(s)
Number	Do. Cumx	Date	E	ffective/ evised Date	20.1.000 20.00	(Zoi	ne AO, use Base
34001C0453	F	08/28/2018		/2018	AE	10	od Dopany
D40. Indicate the source of the Dace Flood Flood Flood for date or have flood don't entered in Item D0:							
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: ☐ FIS Profile ☐ FIRM ☐ Community Determined ☐ Other/Source:							
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 DPA							

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, and/or Bldg. No.) or P.O. Route and Box No. #105 South Essex Avenue			Policy Number:	
	State ZIP Code OF MARGATE New Jersey 08402		Company NAIC Number	
SECTION C – BUILDING ELI	EVATION INFORMAT	ION (SURVEY RE	EQUIRED)	
 C1. Building elevations are based on: Construction *A new Elevation Certificate will be required when concern to the concern to the properties of the build be sent to the build be be according to the build be accordi	onstruction of the buildin VE, V1–V30, V (with Br ling diagram specified i Vertical Datum:	FE), AR, AR/A, AR/ n Item A7. In Puert NAVD88	AF AR/A1-A30 AR/AH AR/AO	
Indicate elevation datum used for the elevations in ite ☐ NGVD 1929 ☑ NAVD 1988 ☐ Other/S	Source:			
Datum used for building elevations must be the same	e as that used for the B	FE.	Check the measurement used.	
a) Top of bottom floor (including basement, crawlsp	ace, or enclosure floor)	<u>7</u> . <u>7</u>		
b) Top of the next higher floor		14. 2	X feet meters	
c) Bottom of the lowest horizontal structural membe	r (V Zones only)	N/A.	Reet meters	
d) Attached garage (top of slab)	•	N/A	X feet meters	
e) Lowest elevation of machinery or equipment serv (Describe type of equipment and location in Com	ricing the building ments)	12. 2	X feet meters	
f) Lowest adjacent (finished) grade next to building	(LAG)	<u>7</u> . <u>6</u>	X feet meters	
g) Highest adjacent (finished) grade next to building	(HAG)	<u> </u>	X feet meters	
 h) Lowest adjacent grade at lowest elevation of decistructural support 	k or stairs, including	<u>7</u> . <u>3</u>	X feet meters	
SECTION D - SURVEYOR,	ENGINEER, OR ARC	HITECT CERTIFI	CATION	
This certification is to be signed and sealed by a land sur- l certify that the information on this Certificate represents statement may be punishable by fine or imprisonment und	my best efforts to inten	oret the data availa	law to certify elevation information. ble. I understand that any false	
Were latitude and longitude in Section A provided by a lic	•	⊠Yes □ No	☑ Check here if attachments.	
Certifier's Name Paul M. Koelling, PLS, CFM	License Number NJ24GS 04328800			
Title				
Licensed Land Surveyor				
Company Name Paul Koelling & Associates, LLC NJ C.O.A. No. 24GA28256300			Place Seal	
Address 2161 Shore Road			Here	
City Linwood	State New Jersey	ZIP Code 08221		
Signature	Date	Telephone (609) 927-0279		
Copy all pages of this Elevation Certificate and all attachmen	nts for (1) community off	icial, (2) insurance a	agent/company, and (3) building owner.	
Comments (including type of equipment and location, per *A8b.) Six (6) Smart Vents Model #1540-1510 engineered		of net area each		
**C2a.) crawlspace enclosure (elev 7.7) elevator pit (25 s.f.)(elev 6.9)				
***C2e.) exterior air unit (elev 16.0)furnace (elev 14.9).	ductwork (elev 12.2)	water heater (el	ev 15.8)	

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the correspond	FOR INSURANCE COMPANY USE				
Building Street Address (including Apt., Unit, Suite, an #105 South Essex Avenue	id/or Bldg. No.) or P.0	O. Route and Box No.	Policy Number:		
CITY OF MARGATE	State New Jersey	ZIP Code 08402	Company NAIC Number		
SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)					
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, enter meters.					
E1. Provide elevation information for the following and the highest adjacent grade (HAG) and the lowest	d check the appropria adjacent grade (LAC	ate boxes to show whetl 6).	ner the elevation is above or below		
a) Top of bottom floor (including basement, crawlspace, or enclosure) isb) Top of bottom floor (including basement,		feet me	ters above or below the HAG.		
crawlspace, or enclosure) is		feet me			
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/			
E3. Attached garage (top of slab) is		feet me			
E4. Top of platform of machinery and/or equipment servicing the building is		feet me	ters above or below the HAG.		
E5. Zone AO only: If no flood depth number is availabely floodplain management ordinance? Yes	ole, is the top of the b	ottom floor elevated in a n. The local official mus	accordance with the community's st certify this information in Section G.		
SECTION F - PROPERTY OW	NER (OR OWNER'S	REPRESENTATIVE)	CERTIFICATION		
The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.					
Property Owner or Owner's Authorized Representative	e's Name				
Address	City		State ZIP Code		
Signature	Dat	e ·	Telephone		
Comments					
			Check here if attachments.		

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corre	FOR INSURANCE COMPANY USE				
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. #105 South Essex Avenue			Policy Number:		
CITY OF MARGATE	State New Jersey	ZIP Code 08402	Company NAIC Number		
SECTIO	ON G - COMMUNITY INFO	ORMATION (OPTIONAL	.)		
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.)					
or Zone AO.			MA-issued or community-issued BFE)		
G3. The following information (Items G4–	G10) is provided for comm	unity floodplain manage	ment purposes.		
G4. Permit Number	G5. Date Permit Issued	G6.	Date Certificate of Compliance/Occupancy Issued		
G7. This permit has been issued for:] New Construction Su	ıbstantial Improvement			
G8. Elevation of as-built lowest floor (including of the building:	basement) ————	fe	et meters Datum		
G9. BFE or (in Zone AO) depth of flooding at t	he building site:	[] fe	et meters Datum		
G10. Community's design flood elevation:		fe	et meters Datum		
Local Official's Name Title J. n. l. n. l. n. l. n. c. C. F. M. Community Name Telephone MANCATE Community Name Telephone					
Community Name MAN	TO BIE	elephone 607	-822-1916		
Signature / 1C/	D	ate	11/8/15		
Comments (including type of equipment and loc	ation, per C2(e), if applica	ble)			
			Check here if attachments.		



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ESR-2074

Reissued 02/2019 This report is subject to renewal 02/2021.

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



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ICC-ES Evaluation Report

ESR-2074

Reissued February 2019

This report is subject to renewal February 2021.

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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:

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)[†]

[†]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 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® 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 SU	750

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	$15^3/_4$ " \times $7^3/_4$ "	200
SmartVENT [®]	1540-510	15 ³ / ₄ " × 7 ³ / ₄ "	200
FloodVENT® Overhead Door	1540-524	$15^3/_4$ " $\times 7^3/_4$ "	200
SmartVENT [®] Overhead Door	1540-514	$15^3/_4$ " $\times 7^3/_4$ "	. 200
Wood Wall FloodVENT [®]	1540-570	14" X 8 ³ / ₄ "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 ³ / 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

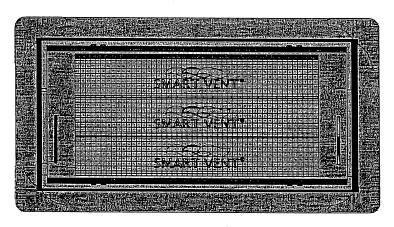


FIGURE 1—SMART VENT: MODEL 1540-510

Building Photographs

	For Insurance Company Use:		
Building Street Address (included #105 South Essex Ave	Policy Number		
City	State	ZIP Code	Company NAIC Number
Margate	New Jersey	08402	

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two 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." If submitting more photographs than will fit on this page, use the Continuation Page on the reverse.





Front View – Date of Photograph: (See Photo Stamp)

Rear View – Date of Photograph: (See Photo Stamp)





Right Side View – Date of Photograph: (See Photo Stamp)

Left Side View – Date of Photograph: (See Photo Stamp)