# 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/con

oop) an pageo or trib	Elevation oc	tilleate and all attachin	iente io	r (1) Community offic	ciai, (z) insurance a	gent/compar	ny, and (3) building owner.
SECTION A PROPERTY INFORMATION				,	FOR INSU	RANCE COMPANY USE	
A1. Building Owner's Name Legacy Home Investments LLC					Policy Num	iber:	
				7			
A2. Building Street Box No. #23 South Cedar G		cluding Apt., Unit, Suite	and/c	or Bldg. No.) or P.O.	Route and	Company N	NAIC Number:
City	TOVE AVEILUE						
CITY OF MAR	GATE			State New Jersey		ZIP Code 08402	
A3. Property Described Block 1/23 Lot 215	ription (Lot ar	nd Block Numbers, Ta	Parce	l Number, Legal De	escription, etc.)		
A4. Building Use (	e.g., Residen	tial, Non-Residential, A	Addition	, Accessory, etc.)	RESIDENTIAL		
A5. Latitude/Longit	ude: ⊡Lat. <u>39</u>	.3227	Long. <u>- 7</u>	74,5109	Horizontal Datum	ı: 🔲 NAD	1927 × NAD 1983
A6. Áttach at least	2 photograph	ns of the building if the	Certific	cate is being used to	o obtain flood insura	ance.	
A7. Building Diagra	ım Number	8			-		
A8. For a building v	۔ vith a crawlsp	pace or enclosure(s):					
a) Square foot	age of crawls	space or enclosure(s)		1,455 · sq ft			
b) Number of p	ermanent flo	od openings in the cra	wlspac	e or enclosure(s) w	ithin 1.0 foot above	adjacent gr	ade 8
c) Total net are	ea of flood op	enings in A8.b1,6	00 s	sq in			
d) Engineered	flood opening	gs? 🗵 Yes 🗌 No	)	•			
A9. For a building w	vith an attach	ed garage:					
a) Square foot	age of attach	ed garage 0		sq ft			
b) Number of p	ermanent flo	od openings in the att	ached g	garage within 1.0 fo	ot above adjacent g	rade	0
c) Total net are	a of flood op	enings in A9.b	0	sq in			
d) Engineered	flood opening	gs? ∐ Yes ⊠ N	0	-			
	SE	CTION B ~ FLOOD IN	ISURA	NCE RATE MAP	(FIRM) INFORMA	TION	
B1. NFIP Communit		ommunity Number		B2. County Name			B3. State
CITY OF MARGATI	E & 3453	.04		ATLANTIC COUN	ITY		New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Ef	IRM Panel ffective/	B8. Flood Zone(s)	(Zo	se Flood Elevation(s) ne AO, use Base
34001C0434	F	08/28/2018		evised Date /2018	AE	10 Floo	od Depth)
B10. Indicate the sc	ource of the F	Base Flood Elevation (	BEE) de	eta or hase flood de	onth entered in Item	BO.	
		Community Determ	-		•		·
B11. Indicate eleva	tion datum us	sed for BFE in Item B9	: 🔲 N	- GVD 1929 ⊠ NA		ner/Source:	
B12. Is the building	located in a	Coastal Barrier Resou	rces Sv	/stem (CBRS) area	or Otherwise Prote	cted Area (C	DPA)? ☐ Yes ☒ No
Designation D					c. outsimos i tote	olog / Hoa (C	21.74; [1 169 [V] NO
<b>3</b>							

## **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 #23 South Cedar Grove Avenue	Policy Number:				
City Sta CITY OF MARGATE New	te ZIP w Jersey 084	Code 02	Company NAIC Number		
SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)					
C1. Building elevations are based on: Construction Drawings* Building Under Construction* X Finished Construction					
*A new Elevation Certificate will be required when co					
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: private Vertical Datum: NAVD88					
Indicate elevation datum used for the elevations in it	<del></del>	****	•		
☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/S		vv.			
Datum used for building elevations must be the sam		BFE.			
a) Tan affection fl. (t.) P. (	· · · · · · · · · · · · · · · · · · ·		Check the measurement used.		
a) Top of bottom floor (including basement, crawlsp	ace, or enclosure floor				
b) Top of the next higher floor	•	12. 0	X feet  meters		
c) Bottom of the lowest horizontal structural membe	er (V Zones only)	<u>N/A</u> ,	X feet  meters		
d) Attached garage (top of slab)		N/A	X feet  meters		
e) Lowest elevation of machinery or equipment sen (Describe type of equipment and location in Com	ments)	9.0	X feet  meters		
f) Lowest adjacent (finished) grade next to building	(LAG)	6, 7	X feet		
g) Highest adjacent (finished) grade next to building	ı (HAG)	<u>7</u> , <u>1</u>	X feet meters		
h) Lowest adjacent grade at lowest elevation of dec structural support	k or stairs, including	6. 4	X feet meters		
SECTION D - SURVEYOR,	ENGINEER, OR ARC	CHITECT CERTIF	ICATION		
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 lic			X Check here if attachments.		
Certifier's Name	License Number				
Paul M. Koelling, PLS, CFM Title	NJ24GS 04328800				
Licensed Land Surveyor					
Company Name	Place				
Paul Koelling & Associates, LLC NJ C.O.A. No. 24GA28256300			Seal		
Address 2161 Shore Road					
City Linwood	State New Jersey	ZIP Code 08221			
Signature / Signature	Date 9-25-18	Telephone (609) 927-0279	<u> </u>		
Copy all pages of this Elevation Certificate and all attachme	nts for (1) community of	ficial, (2) insurance	agent/company, and (3) building owner.		
Comments (including type of equipment and location, per *A8b.) Smart Vents Model #1540-510 engineered for 200		rea each			
***C2a.) crawlspace					
****C2e.) exterior air unit (elev 11.9)ductwork (elev 9.0)					
	•				

## **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the correspo	nding information from	m Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, a #23 South Cedar Grove Avenue	ind/or Bldg. No.) or P.C	). Route and Box No.	Policy Number:
CITY OF MARGATE	State New Jersey	ZIP Code 08402	Company NAIC Number
SECTION E – BUILDING   FOR ZO	ELEVATION INFORM NE AO AND ZONE A		REQUIRED)
For Zones AO and A (without BFE), complete Items complete Sections A, B,and C. For Items E1–E4, usenter meters.	E1–E5. If the Certificat a natural grade, if avail	e is intended to support a able. Check the measure	LOMA or LOMR-F request, ment used. In Puerto Rico only,
E1. Provide elevation information for the following a the highest adjacent grade (HAG) and the lower at the highest adjacent grade (HAG) and the lower at the state of the sta	nd check the appropria st adjacent grade (LAG	te boxes to show whethe ).	r the elevation is above or below
a) Top of bottom floor (including basement, crawlspace, or enclosure) is      Top of bottom floor (including basement)		feet mete	rs 🔲 above or 🔲 below the HAG.
<ul> <li>b) Top of bottom floor (including basement, crawlspace, or enclosure) is</li> </ul>	- 12 to 12 t	feet mete	s above or below the LAG.
E2. For Building Diagrams 6–9 with permanent floor the next higher floor (elevation C2.b in	d openings provided in	Section A Items 8 and/or	
the diagrams) of the building is  E3. Attached garage (top of slab) is	•	feet mete	
E4. Top of platform of machinery and/or equipment		feet mete	rs above or below the HAG.
servicing the building is  E5. Zone AO only: If no flood depth number is avail.		feet mete	
floodplain management ordinance? Yes	No Unknown	. The local official must	certify this information in Section G.
SECTION F PROPERTY O	WNER (OR OWNER'S	REPRESENTATIVE) CI	ERTIFICATION
		·	
The property owner or owner's authorized represent community-issued BFE) or Zone AO must sign here	ative who completes So The statements in Sec	ections A, B, and E for Zo ctions A, B, and E are co	one A (without a FEMA-issued or rect to the best of my knowledge.
The property owner or owner's authorized represent community-issued BFE) or Zone AO must sign here Property Owner or Owner's Authorized Representation	The statements in Sec	ections A, B, and E for Zotions A, B, and E are co	one A (without a FEMA-issued or rect to the best of my knowledge.
community-issued BFE) or Zone AO must sign here	The statements in Sec	ctions A, B, and E are con	one A (without a FEMA-issued or rect to the best of my knowledge.
community-issued BFE) or Zone AO must sign here Property Owner or Owner's Authorized Representati	The statements in Sec ve's Name	ctions A, B, and E are con	rect to the best of my knowledge.
community-issued BFE) or Zone AO must sign here Property Owner or Owner's Authorized Representati Address	The statements in Sec ve's Name City	ctions A, B, and E are con	rect to the best of my knowledge.
community-issued BFE) or Zone AO must sign here Property Owner or Owner's Authorized Representati Address Signature	The statements in Sec ve's Name City	ctions A, B, and E are con	rect to the best of my knowledge.
community-issued BFE) or Zone AO must sign here Property Owner or Owner's Authorized Representati Address Signature	The statements in Sec ve's Name City	ctions A, B, and E are con	rect to the best of my knowledge.
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community-issued BFE) or Zone AO must sign here Property Owner or Owner's Authorized Representati Address Signature	The statements in Sec ve's Name City	ctions A, B, and E are con	rect to the best of my knowledge.

## **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. #23 South Cedar Grove Avenue			Policy Number:		
ATTACACA TO THE STREET PROPERTY OF THE STREET					
City	State	ZIP Code	Company NAIC Number		
CITY OF MARGATE	New Jersey	08402			
SECTION	ON G – COMMUNITY II	NFORMATION (OPTIONA	AL)		
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.)					
G2. A community official completed Sect or Zone AO.	ion E for a building loca	ted in Zone A (without a F	EMA-issued or community-issued BFE)		
G3. The following information (Items G4-	-G10) is provided for co	mmunity floodplain manaç	gement purposes.		
G4. Permit Number	G5. Date Permit Issu	ed G	Date Certificate of     Compliance/Occupancy Issued		
G7. This permit has been issued for:	New Construction	Substantial Improvement			
G8. Elevation of as-built lowest floor (including of the building:	g basement)		feet meters Datum		
G9. BFE or (in Zone AO) depth of flooding at	G9. BFE or (in Zone AO) depth of flooding at the building site: feet meters				
G10. Community's design flood elevation:	G10. Community's design flood elevation:				
Local Official's Name  Title  CFM					
Community Name  Telephone  MALGATY  Boto  Data					
Signature Date 9/C6/18					
Comments (including type of equipment and location, per C2(e), if applicable)					
ii.	•				
- P					
,					
9					
			Check here if attachments.		

# **Building Photographs**

	See Instructions for Ite	m A6.	For Insurance Company Use:
Building Street Address (including #23 South Cedar Grove #	Apt., Unit, Suite, and/or Bldg.) No. or P.0 <b>Avenue</b>	D. Route and Box No.	Policy Number
City <b>Margate</b>	State <b>New Jersey</b>	ZIP Code <b>08234</b>	Company NAIC Number

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)

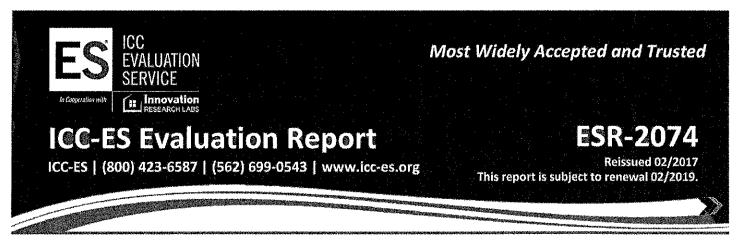
Rear View – Date of Photograph: (See Photo Stamp)





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

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



**DIVISION: 08 00 00—OPENINGS** 

SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

### REPORT HOLDER:

## SMARTVENT PRODUCTS, INC.

430 ANDBRO DRIVE, UNIT 1 PITMAN, NEW JERSEY 08071

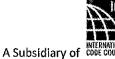
### **EVALUATION SUBJECT:**

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514



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## **ICC-ES Evaluation Report**

## **ESR-2074**

Reissued February 2017 Revised November 2017

This report is subject to renewal February 2019.

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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:

SMARTVENT PRODUCTS, INC. 430 ANDBRO DRIVE, UNIT 1 PITMAN, NEW JERSEY 08071 (877) 441-8368 www.smartvent.com info@smartvent.com

#### **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

#### 1.0 EVALUATION SCOPE

#### Compliance with the following codes:

- 2015, 2012, 2009 and 2006 International Building Code® (IBC)
- 2015, 2012, 2009 and 2006 International Residential Code® (IRC)
- 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.

## 4.0 DESIGN AND INSTALLATION

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.

### 5.0 CONDITIONS OF USE

The Smart Vent<sup>®</sup> 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

Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015.

## 7.0 IDENTIFICATION

The Smart VENT® models 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).

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 <sup>®</sup>	1540-510	15 <sup>3</sup> / <sub>4</sub> " X 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> / <sub>4</sub> "	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 <sup>®</sup> Stacker	1540-521	16" X 16"	400	

For SI: 1 inch = 25.4 mm; 1 square foot = m<sup>2</sup>

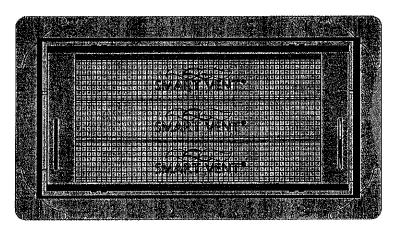


FIGURE 1—SMART VENT: MODEL 1540-510

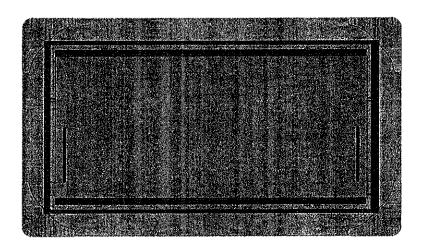


FIGURE 2-SMART VENT MODEL 1540-520

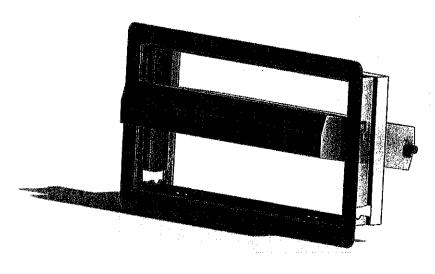


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN