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

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

JUL 7 0 2017

## **ELEVATION CERTIFICATE**

Important: Follow the instructions on pages 1-9.

Copy all pages of this Elevation Certificate and all attachments for (	<ol> <li>community official, (2) insurance agent/company, and (3) building bwne</li> </ol>

SECTION A - PROPERTY INFORMATION					FOR INSURANCE COMPANY USE		
A1. Building Owne Tony Piraino	A1. Building Owner's Name Policy Number:						ber:
<ul> <li>A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.</li> <li>14 S. Knight Ave.</li> </ul>					Company N	AIC Number:	
City CITY OF MAR	GATE					ZIP Code 08402	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Block 112.02 lot 19							
A4. Building Use (	A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL						
A5. Latitude/Longit	ude: Lat. N	39.3270 I	ong. V	V 074.5031	Horizontal Datum	n: NAD 1	927 X NAD 1983
A6. Attach at least	2 photograph	ns of the building if the	Certific	ate is being used to	o obtain flood insura	ance.	=
A7. Building Diagra	m Number	8					
A8. For a building	with a crawlsp	pace or enclosure(s):			×:		
a) Square foot	age of crawls	pace or enclosure(s)		983 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	ade5
c) Total net are	ea of flood op	enings in A8.b1,00	00 s	q in			
d) Engineered	flood opening	gs? 🛛 Yes 🗌 No	)				
A9. For a building v	vith an attach	ed garage:					
a) Square foot	age of attach	ed garage 0		sq ft			
b) Number of p	permanent flo	od openings in the atta	ached g	garage within 1.0 foo	ot above adjacent g	ırade	0
c) Total net are	ea of flood op	enings in A9.b	)	sq in		-	
d) Engineered			<u> </u>				
, 3		,			y•		
	SE	CTION B - FLOOD IN	ISURA	NCE RATE MAP	(FIRM) INFORMA	TION	
B1. NFIP Community Name & Community Number CITY OF MARGATE & 345304		B2. County Name ATLANTIC COUNTY			B3. State		
CITT OF WARGATI	E & 3453	<del></del>		ATLANTIC COON			New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date		IRM Panel fective/	B8. Flood Zone(s)	B9. Bas	e Flood Elevation(s) ne AO, use Base
345304/0001	С	10/18/1983	Revised Date 10/18/1983 A8**		A8**	10**	od Depth)
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: X 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							

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MPORTANT: In these spaces, copy the corresponding	FOR INSURANCE COMPANY USE				
Juilding Street Address (including Apt., Unit, Suite, and/o	Policy Number:				
City	Company NAIC Number				
CITY OF MARGATE Ne					
SECTION C – BUILDING EL	EVATION INFORMA	TION (SURVEY RE	EQUIRED)		
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.					
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: NGVD29					
Indicate elevation datum used for the elevations in i		w.			
Datum used for building elevations must be the san		BFE.	Oh a al- Ha		
a) Top of bottom floor (including basement, crawls	pace, or enclosure floor	8.8	Check the measurement used.    X   feet		
b) Top of the next higher floor		13. 5	X feet  meters		
c) Bottom of the lowest horizontal structural members	er (V Zones only)	N/A	X feet  meters		
d) Attached garage (top of slab)		N/A	X feet _ meters		
<ul> <li>e) Lowest elevation of machinery or equipment ser (Describe type of equipment and location in Con</li> </ul>	vicing the building nments)	115	X feet meters		
f) Lowest adjacent (finished) grade next to building	g (LAG)	<u>8</u> . <u>5</u>	X feet  meters		
g) Highest adjacent (finished) grade next to building	g (HAG)	<u>8</u> . 9	x feet meters		
h) Lowest adjacent grade at lowest elevation of dec structural support	ck or stairs, including	8. <u>2</u>	X feet meters		
SECTION D - SURVEYOR					
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 lie	censed land surveyor?	⊠Yes □No	X 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. 24GA2	Place Seal				
Address	Here				
2161 Shore Road					
City Linwood	State New Jersey	ZIP Code 08221			
Signature	Date 06/29/2017	Telephone (609) 927-0279			
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)  *A8b.) Smart Vents Model #1540-510 engineered for 200 square inches of net area each  **B8 & B9.) FEMA Pre-FIRM Zone "AE"Base Flood Elevation 9 ft. (NAVD88) converted = 10.3 ft. (NGVD29)  ***C2a.) crawlspace enclosure  ****C2e.)ductwork elev (elev 11.5)electrical outlets (elev 13.8)					

# **ELEVATION CERTIFICATE**

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IMPORTANT: In these spaces, copy the correspon	FOR INSURANCE COMPANY USE					
Ruilding Street Address (including Apt., Unit, Suite, a	Policy Number:					
.14 S. Knight Ave.			6			
City	State	ZIP Code	Company NAIC Number			
CITY OF MARGATE	New Jersey	08402				
	SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED)  FOR ZONE AO AND ZONE A (WITHOUT BFE)					
For Zones AO and A (without BEE), complete Items F	=1_F5_If the Certifica	te is intended to support	a LOMA or LOMR-E request			
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 an the highest adjacent grade (HAG) and the lowes:			er the elevation is above or below			
Top of bottom floor (including basement, crawlspace, or enclosure) is		feet mete	ers above or below the HAG.			
b) Top of bottom floor (including basement, crawlspace, or enclosure) is		feet	ers above or below the LAG.			
E2. For Building Diagrams 6–9 with permanent flood	openings provided in	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		feet mete	ers above or below the HAG.			
E3. Attached garage (top of slab) is	<del></del>	feet _ mete	ers above or below the HAG.			
E4. Top of platform of machinery and/or equipment servicing the building is		feet _ mete	ers  above or below the HAG.			
E5. Zone AO only: If no flood depth number is availal floodplain management ordinance? Yes			ccordance with the community's certify this information in Section G.			
SECTION F – PROPERTY OV	VNER (OR OWNER'S	REPRESENTATIVE) C	ERTIFICATION			
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's Name						
Address	City	,	tate ZIP Code			
Address	Oit	, 5	tate ZIP Code			
Signature	Da	e T	elephone			
Comments		v				
			*			
			Check here if attachments.			

## **ELEVATION CERTIFICATE**

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

MPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE	
Building Street Address (including Apt., Un 14 SOUTH KNIGHT AVENUE	it, Suite, and/or Bldg. No.) (	or P.O. Route and Box No.	Policy Number:	
City MARGATE	State New Jersey	ZIP Code 08402	Company NAIC Number	
SEC	CTION G - COMMUNITY	INFORMATION (OPTIONA	L)	
The local official who is authorized by law of Sections A, B, C (or E), and G of this Elevated in Items G8–G10. In Puerto Rico only	ation Certificate. Complete	the community's floodplain the applicable item(s) and	management ordinance can complete sign below. Check the measurement	
	norized by law to certify ele		d and sealed by a licensed surveyor, e the source and date of the elevation	
G2. A community official completed S or Zone AO.	Section E for a building loca	ated in Zone A (without a F	EMA-issued or community-issued BFE)	
G3.  The following information (Items	G4-G10) is provided for co	ommunity floodplain manag	ement purposes.	
G4. Permit Number	G5. Date Permit Issu	ued G6	Date Certificate of Compliance/Occupancy Issued	
G7. This permit has been issued for:	☐ New Construction ☐	Substantial Improvement		
G8. Elevation of as-built lowest floor (inclu of the building:	ding basement)	f	eet meters Datum	
G9. BFE or (in Zone AO) depth of flooding	at the building site:	[ ] f	eet  meters Datum	
G10. Community's design flood elevation:	Parties and the second		eet  meters Datum	
Local Official's Name	antino	Title		
Community Name  MANGA	T:	Telephone 609-811	-1918	
Signature 7 Cu		609-812 Date 3/21/1	E	
Comments (including type of equipment and	I location, per C2(e), if app	olicable)		
		381437	E CITY BUILDING DEPARTMENT 9001 Winches in Ave. Margate City, NJ 08402	
			1 0	
(6)			¥	
			Check here if attachments.	

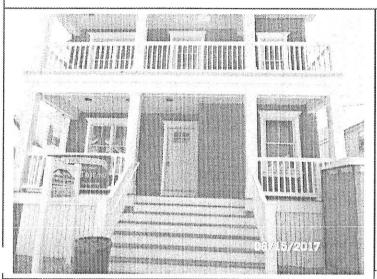
# **Building Photographs**

Building Street Address (including Apt., Unit, Suite, and/or Bldg.) No. or P.O. Route and Box No.

14 S. Knight Ave.

City
State
NJ
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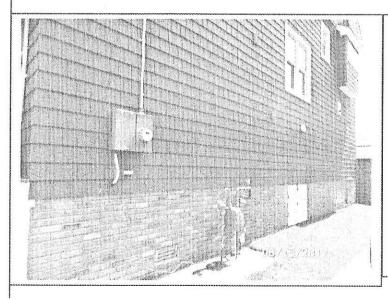
If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two building photographs below according to the instructions for Item A6. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." If submitting more photographs than will fit on this page, use the Continuation Page on the reverse.

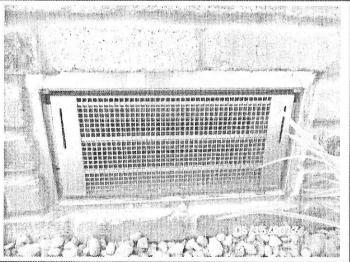




Front View - Date of Photograph: (See Photo Stamp)

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





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

Vent View - Date of Photograph: (See Photo Stamp)



# **ICC-ES Evaluation Report**

**ESR-2074\*** 

Reissued December 2012

This report is subject to renewal February 1, 2015.

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:

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: FLOODVENT™ MODEL #1540-520; FLOODVENT™ TACKING MODEL #1540-521; SMARTVENT™ MODEL #1540-510; SMARTVENT™ STACKING MODEL #1540-511; WOOD WALL FLOOD MODEL #1540-570; WOOD WALL FLOOD OVERHEAD DOOR MODEL #1540-574; FLOODVENT™ OVERHEAD DOOR MODEL #1540-524; SMARTVENT™ OVERHEAD DOOR MODEL #1540-514.

#### 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2009 and 2006 International Building Code® (IBC)
- 2009 and 2006 International Residential Code® (IRC)

#### Properties evaluated:

- Physical operation
- Water flow

#### **2.0 USES**

The Smart Vent<sup>®</sup> units are automatic foundation flood vents (AFFVs) employed to equalize hydrostatic pressure on nonfire-resistance-rated foundation walls, rolling-type overhead doors and building walls subject to rising or falling flood waters. The Smart Vent<sup>®</sup> units are intended for use where flood hazard areas have been established in accordance with IBC Section 1612.3 or IRC Section R3222.1. Certain models also allow natural ventilation in accordance with Section 1203 of the IBC or Section 408.1 of the IRC.

#### .0 DESCRIPTION

#### 3.1 General:

When subjected to pressure from rising water, the Smart Vent® AFFVs disengage, 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 AFFV 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 plate to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. 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 AFFVs comply with the design principle noted in Section 2.6.2.2 of ASCE/SEI 24 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 AFFVs must be installed in accordance with Section 4.0.

#### 3.3 Model Sizes:

The FloodVENT™ Model #1540-520, SmartVENT™ Model #1540-510, FloodVENT™ Overhead Door Model #1540-524, and SmartVENT™ Overhead Door Model #1540-514 units measure 15³/₄ inches wide by 7³/₄ inches high (400 by 196.9 mm). The Wood Wall Flood Model #1540-570 and Wood Wall Flood Overhead Door Model #1540-574 units measure 14 inches wide by 8³/₄ inches high (355.6 by 222.25 mm). The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units measure 16 inches wide by 16 inches high (406.4 by 406.4 mm).

#### 3.4 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 AFFVs recognized in this report do not offer natural ventilation.

#### 4.0 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. The mounting straps allow mounting in wood, masonry and