### 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 INSU	RANCE COMPANY USE	
A1. Building Owner's Name					Policy Num	iber:	
8009 Winchester, I				DI. 11 \ D.O.			
<ul> <li>A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.</li> <li>101 N. Gladstone Ave.</li> </ul>					. Route and	Company N	NAIC Number:
City CITY OF MAR				State New Jersey		ZIP Code 08402	
A3. Property Desc Block 307.02 Lot 3		nd Block Numbers, Tax	(Parce	l Number, Legal De	escription, etc.)		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL							
A5. Latitude/Longi	tude: Lat. N	39.3317	Long. <u>V</u>	V 074.5012	Horizontal Datum	n: NAD	1927 🗵 NAD 1983
A6. Attach at least	2 photograph	hs of the building if the	Certific	cate is being used to	o obtain flood insura	ance.	
A7. Building Diagra	am Number	8					
A8. For a building	with a crawls <sub>l</sub>	pace or enclosure(s):					
a) Square foo	tage of crawls	space or enclosure(s)		1,165 sq ft			
b) Number of	permanent flo	ood openings in the cra	wlspac	e or enclosure(s) w	ithin 1.0 foot above	adjacent gr	ade7
c) Total net area of flood openings in A8.bsq in							
d) Engineered flood openings? 🗵 Yes 🗌 No							
A9. For a building with an attached garage:							
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 grade 0							
c) Total net area of flood openings in A9.b 0 sq in							
d) Engineered flood openings?  Yes  No							
	SE	CTION B – FLOOD IN	ISURA	NCE RATE MAP	(FIRM) INFORMA	TION	
B1. NFIP Communi	ty Name & Co	ommunity Number		B2. County Name	American Services		B3. State
CITY OF MARGATI	E & 3453	104		ATLANTIC COUN	ITY		New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Ef	IRM Panel ffective/ evised Date	B8. Flood Zone(s)	(Zoi	se Flood Elevation(s) ne AO, use Base od Depth)
345304/0001	С	10/18/1983	10/18		A8**	10**	od Bopiny
B10. Indicate the so	ource of the E	Base Flood Elevation (F	3FE) da	ata or base flood de	pth entered in Item	B9:	
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 OPA							

# **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corresponding infor	FOR INSURANCE COMPANY USE	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. 101 N. Gladstone Ave.	No.) or P.O. Route and Box No.	Policy Number:
City State CITY OF MARGATE New Jers	ZIP Code ey 08402	Company NAIC Number
SECTION C – BUILDING ELEVAT	ION INFORMATION (SURVEY R	EQUIRED)
C1. Building elevations are based on: Construction Dra  *A new Elevation Certificate will be required when constru  C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V  Complete Items C2.a–h below according to the building di  Benchmark Utilized: private  Indicate elevation datum used for the elevations in items a  X NGVD 1929 NAVD 1988 Other/Source  Datum used for building elevations must be the same as the  a) Top of bottom floor (including basement, crawlspace, of  b) Top of the next higher floor  c) Bottom of the lowest horizontal structural member (V Zond) Attached garage (top of slab)  e) Lowest elevation of machinery or equipment servicing to (Describe type of equipment and location in Comments)  f) Lowest adjacent (finished) grade next to building (LAG)  g) Highest adjacent (finished) grade next to building (HAG)	wings*	Check the measurement used.  Feet meters  Feet meters  Feet meters  Feet meters  Feet meters  Feet meters  Feet meters
<ul> <li>h) Lowest adjacent grade at lowest elevation of deck or st structural support</li> </ul>	airs, including7. 0	X feet meters
SECTION D – SURVEYOR, ENGI	NEER, OR ARCHITECT CERTIF	ICATION
	est efforts to interpret the data availa U.S. Code, Section 1001.  land surveyor? Yes No nse Number IGS 04328800	Place Seal Here
City State	ZIP Code Jersey 08221	-
Signature Date 07/0	Telephone 7/2016 (609) 927-0279	
Copy all pages of this Elevation Certificate and all attachments for		agent/company, and (3) building owner.
Comments (including type of equipment and location, per C2(e), *A8b.) Smart Vents Model #1540-510 engineered for 200 square **B8 & B9.) FEMA Pre-FIRM Zone "AE"Base Flood Elevation ***C2a.) crawlspace enclosure ****C2e.) exterior air unit elev. is 12.2, electrical outlet elev. 9.0	e inches of net area each	. (NGVD29)

#PORTANT: In these spaces, co	ppy the corresponding information from	m Section A.	FOR INSURANC COMPANY USE
	Unit, Suite, and/or Bldg. No.) or P.O. Route a		Policy Number:
ity MARGATE	State NJ	ZIP Code 08402	Company NAIC Number:
SECTION	D – SURVEYOR, ENGINEER, OR ARCH	HITECT CERTIFICATION	ON (CONTINUED)
opy both sides of this Elevation Certifi	cate for (1) community official, (2) insurance a	agent/company, and (3) bu	ilding owner.
omments \[ \alpha \begin{align*} & \alpha align	Dengineered for 200 square inches of net area "Base Flood Elevation 8 ft. (NAVD88) con- ductwork elev. is 11.3	a each, also 1 foundation overted = 9.3 ft. (NGVD29)	ppening
ignature	Date	e 1/20/2016	17.35000.00000000000000000000000000000000
SECTION E - BUILDING ELEV	ATION INFORMATION (SURVEY NOT	REQUIRED) FOR ZON	NE AO AND ZONE A (WITHOUT BFE)
and C. For Items E1-E4, use natural gr	mplete Items E1–E5. If the Certificate is intendered, if available. Check the measurement use the following and check the appropriate boxes	ea. In Puerto Rico offly, el	itel meters.
grade (HAG) and the lowest adjact a) Top of bottom floor (including to b) Top of platform of machinery and Top of platform of machinery and Top of Opiv: If no flood depth in	cent grade (LAG).  passement, crawlspace, or enclosure) is  passement, crawlspace, or enclosure) is  parament flood openings provided in Section of the building is feet about the parameters	A Items 8 and/or 9 (see parties above or below the HAG	eters  above or  below the HAG. eters  above or  below the LAG. ages 8–9 of Instructions), the next higher floor below the HAG.
	F - PROPERTY OWNER (OR OWNER'		CERTIFICATION
the property owner or owner's authorizer Zone AO must sign here. The statem roperty Owner's or Owner's Authorize	nents in Sections A, B, and E are correct to the	e best of my knowledge.	out a FEMA-issued or community-issued BFE)
ddress	City	3	State ZIP Code
ignature	Date		Telephone
comments			☐ Check here if attachments
	SECTION G - COMMUNITY INFO	ORMATION (OPTIONA	L)
u: Etambles Codificate Complete the	or ordinance to administer the community's flo	odplain management ordin measurement used in Items	ance can complete Sections A, B, C (or E), and G s G8–G10. In Puerto Rico only, enter meters.
: the rived by law to certify (	vas taken from other documentation that has belevation information. (Indicate the source and Section E for a building located in Zone A (v	u date of the cicration da	y a licensed surveyor, engineer, or architect who a in the Comments area below.) community-issued BFE) or Zone AO.
A community official complete	ns G4-G10) is provided for community floodpl	lain management purpose	s.
The following information (iten     Hermit Number	G5. Date Permit Issued	G6. Date Certificate	e Of Compliance/Occupancy Issued
7. This permit has been issued for: 8. Elevation of as-built lowest floor (in 9. BFE or (in Zone AO) depth of flood 10. Community's design flood elevation	ling at the building site:	Improvement feet met feet met	ers Datum
_ocal Official's Name		Title	
Community Name		Telephone	
Signature //		Date 3/14/16	
Comments	#	7	☐ Check here if attachmen

# **Building Photographs**

	For Insurance Company Use:		
Building Street Address (inclination of the No. Gladstone Av	uding Apt., Unit, Suite, and/or Bldg.) No. c <b>e.</b>	or P.O. Route and Box No.	Policy Number
City <b>Margate</b>	State <b>NJ</b>	ZIP Code <b>08402</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)







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

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



# **ICC-ES Evaluation Report**

ESR-2074

Reissued February 1, 2009

This report is subject to re-examination in two years.

www.icc-eg.org | (800) 423-6567 | (562) 699-0543

A Subsidiery of the International Code Council®

DIVISION: 10—SPECIALTIES Section: 10230—Vents

#### REPORT HOLDER:

SMART VENT<sup>®</sup>, INC.
450 ANDBRO DRIVE, SUITE 2B
PITMAN, NEW JERSEY 05071
(556) 307-1458
www.smartvent.com
eval@smartvent.com

#### **EVALUATION SUBJECT:**

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS:
FLOODVENT™ MODEL #1640-620; FLOODVENT™
STACKING MODEL #1640-621; SMARTVENT™ MODEL
#1640-610; SMARTVENT™ STACKING MODEL #1640-611;
WOOD WALL FLOOD MODEL #1640-670; WOOD WALL
FLOOD OVERHEAD DOOR MODEL #1640-674;
FLOODVENT™ OVERHEAD DOOR MODEL #1640-634;
SMARTVENT™ OVERHEAD DOOR MODEL #1640-614

#### 1.0 . EVALUATION SCOPE

Compliance with the following codes:

- = 2006 International Building Code® (IBC)
- 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. Certain models also allow natural ventilation in accordance with Section 1203 of the IBC or Section 408.1 of the IRC.

#### 3.0 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, and each opening provides 76 square inches (49 032 mm²) of net free area for flood mitigation in the open position. The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units each contain two vertically arranged openings per unit, providing 152 square inches (98 064 mm²) of net free area for flood mitigation in the open position.

## 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 Smart/ENT® Model #1540-510 and Smart/ENT® Overhead Door Model #1540-514 both have screen covers with \$1\_4\text{-inch-by-\$1\_4\text{-inch}}\$ (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm²) of net free area to supply natural ventilation. The Smart/ENT™ 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 concrets walls up to 12 inches (305 mm) thick. In order to

