U.S. DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY: MANAGEMENT AGENCY National Flood Insurance Program

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008

Expiration Date: July 31, 2015

		SEC	TION A DE	ODEDTY INICO	DMATION	DE LA SEVIE	
A1. Building Owne	r's Name Mitchell Mil		HUN A - FR	OPERTY INFO	RMATION		NSURANCE COMPANY USE Number:
A2. Building Street	Address (including A	Apt., Unit, Suite, and/or	r Bldg. No.) or F	O. Route and B	ox No.		ny NAIC Number
3301 Winchester A	ve. GH OF LONGPORT		Ctoto	7ID Co	3-00400		
			State		de 08403	a la	
A3. Property Desc BLOCK 96 LOT 2		Numbers, Tax Parcel	Number, Legal	Description, etc.))		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL A5. Latitude/Longitude: Lat. N 39.3198 Long. W 074.5219 Horizontal Datum: NAD 1927 NAD 1983 A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance. A7. Building Diagram Number 8 A8. For a building with a crawlspace or enclosure(s): a) Square footage of crawlspace or enclosure(s) b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 8 c) Total net area of flood openings? Yes No A9. For a building with an attached garage: a) Square footage of attached garage N/A sq ft b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade N/A c) Total net area of flood openings? Yes No d) Engineered flood openings? Yes No							
	SE	CTION B - FLOOD	INSURANC	E RATE MAP ((FIRM) INFORMATIO	NC	
B1. NFIP Communi BOROUGH OF LO	ty Name & Communit NGPORT 345302	y Number	B2. County N ATLANTIC C			B3. Sta	ate
B4. Map/Panel Nu 345302/ 0001			Effec	37. FIRM Panel ctive/Revised Dat 08/15/1983	B8. Flood te Zone(s) A8		Base Flood Elevation(s) (Zone AO, use base flood depth)
345302/ 0001 B No Index Printed 08/15/1983 A8 10 310. 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: 111. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/Source: 122. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes No Designation Date: CBRS OPA							
	SECT	ION C - BUILDING	ELEVATION	INFORMATIC	N (SURVEY REQU	IRED)	THE RESIDENCE OF THE PROPERTY
SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED) C1. Building elevations are based on: C2. Construction Drawings* C3. Building Under Construction* C4. Building Under Construction* C5. 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. C6. Benchmark Utilized: C7. Benchmark Utilized: C8. Drivate C9. Vertical Datum: C9. NGVD 1929 C9. NAVD 1988 C9. Other/Source: C9. Datum used for building elevations must be the same as that used for the BFE.							
			,			20040	asurement used.
b) Top of the ne c) Bottom of the d) Attached gara e) Lowest eleva (Describe typ	xt higher floor lowest horizontal stru age (top of slab) tion of machinery or e e of equipment and lo	ement, crawlspace, or e uctural member (V Zon equipment servicing the ocation in Comments)	nes only)		6.7 13.3 N/A. N/A.	☆ feet☆ feet☆ feet☆ feet☆ feet	meters meters meters meters meters
g) Highest adjac		ext to building (LAG) next to building (HAG) levation of deck or stai			<u>6.6</u> <u>6.9</u> <u>N/A</u>	⊠ feet ⊠ feet ⊠ feet	meters
	SEC.		OR. ENGINE	ER, OR ARCHI	TECT CERTIFICAT	ION	
information. I certify I understand that ar	to be signed and seal that the information of ny false statement ma comments are provide attachments.	TION D – SURVEYOR led by a land surveyor, on this Certificate repress by be punishable by fin	r, engineer, or an resents my best ne or imprisonm	rchitect authorizer efforts to interpreent under 18 U.S and longitude in disurveyor?	trect certificated by law to certify elevate the data available. S. Code, Section 1001. In Section A provided by ✓ Yes □ No ber NJ24GS 04328800	ation r	PLACE SEAL HERE
information. I certify I understand that ar Check here if a	to be signed and seal that the information of the provided statement of the comments are provided attachments.	TION D – SURVEYOR led by a land surveyor, on this Certificate repress by be punishable by fin	r, engineer, or an resents my best ne or imprisonm Were latitude licensed land	rchitect authorize efforts to interpre- ent under 18 U.S e and longitude in d surveyor?	ed by law to certify elevate the data available. 5. Code, Section 1001. n Section A provided by ☑ Yes ☐ No ber NJ24GS 04328800	ation r	SEAL
information. I certify I understand that ar Check here if a Check here if a Certifier's Name Pa	to be signed and seal to that the information of my false statement ma comments are provide attachments. ul M. Koelling, PLS	TION D – SURVEYOR led by a land surveyor, on this Certificate repro- ay be punishable by fin ed on back of form.	r, engineer, or an resents my best ne or imprisonm Were latitude licensed land	rchitect authorized efforts to interpretent under 18 U.S et and longitude in disurveyor? License Number & Associates,	ed by law to certify elevate the data available. 5. Code, Section 1001. n Section A provided by ☑ Yes ☐ No ber NJ24GS 04328800	ation r	SEAL

للدلامانات تحاددان اصماله بمو	JC &		
IMPORTANT: In these spaces, co	py the corresponding information from Se	ction A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., 3301 Winchester Ave.	x No.	Policy Number:	
City BOROUGH OF LONGPORT	State NJ ZIP	Code 08403	Company NAIC Number:
SECTION I	O – SURVEYOR, ENGINEER, OR ARCHITEC	T CERTIFICATION	(CONTINUED)
Copy both sides of this Elevation Certific	cate for (1) community official, (2) insurance agent/	company, and (3) building	ng owner.
Comments *A8b.) Dwelling has 6 smart vents (mod ***C2a.) crawlspace ****C2e.) Air unit elevation is 32.9, duc **B8 & B9.) FEMA Flood Hazard Resou	lel #1540-510 and two 20" x 16" holes twork elevation is 11.6, furnace elevation is 12.3, h rces Map Zone AE9Base Flood Elevation 9 ft. (ot water heater elevation	n is 32.2 10.3 ft. (NGVD29)
Signature	Date 6/2	3/14	
SECTION E - BUILDING ELEV	ATION INFORMATION (SURVEY NOT REQ	UIRED) FOR ZONE	AO AND ZONE A (WITHOUT BFE)
 and C. For Items E1–E4, use natural gr E1. Provide elevation information for t grade (HAG) and the lowest adjace a) Top of bottom floor (including b b) Top of bottom floor (including b b) Top of bottom floor (including b E2. For Building Diagrams 6–9 with preference (elevation C2.b in the diagrams) of E3. Attached garage (top of slab) is E4. Top of platform of machinery and E5. Zone AO only: If no flood depth in 	asement, crawlspace, or enclosure) is asement, crawlspace, or enclosure) is ermanent flood openings provided in Section A Iten if the building is	Puerto Rico only, enter ow whether the elevatio feet meter feet meter s 8 and/or 9 (see pages s below the HAG. feet meters called	meters. n is above or below the highest adjacent s above or below the HAG. s above or below the LAG. s 8–9 of Instructions), the next higher floor with the HAG. above or below the HAG.
	- PROPERTY OWNER (OR OWNER'S RE		RTIFICATION
The property owner or owner's authorize or Zone AO must sign here. The statem Property Owner's or Owner's Authorized	ed representative who completes Sections A, B, an ents in Sections A, B, and E are correct to the best d Representative's Name	d E for Zone A (without of my knowledge.	a FEMA-issued or community-issued BFE)
Address	City	Sta	ate ZIP Code
Signature	Date	Te	lephone
Comments			
			☐ Check here if attachments
	SECTION G - COMMUNITY INFORMA		
The local official who is authorized by law of this Elevation Certificate. Complete the	or ordinance to administer the community's floodplai applicable item(s) and sign below. Check the measu	n management ordinance rement used in Items G8	e can complete Sections A, B, C (or E), and G –G10. In Puerto Rico only, enter meters.
G1. The information in Section C w is authorized by law to certify e G2. A community official completed	as taken from other documentation that has been s levation information. (Indicate the source and date I Section E for a building located in Zone A (without is G4–G10) is provided for community floodplain ma	igned and sealed by a l of the elevation data in a FEMA-issued or com	censed surveyor, engineer, or architect who the Comments area below.)
G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate Of	Compliance/Occupancy Issued
G7. This permit has been issued for: G8. Elevation of as-built lowest floor (in: G9. BFE or (in Zone AO) depth of flood G10. Community's design flood elevation Local Official's Name Community Name Signature	ing at the building site:	feet meters feet meters feet meters	Datum Datum Datum
Comments	- Duto		
Commonto		***************************************	Check here if attachments

- II ----ious aditions.

Building Photographs

	See Instructions for	See Instructions for Item A6.		
Building Street Address (inclu #3301 Winchester Av	Policy Number			
City Longport	State NJ	ZIP Code 08403	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)



ICC-ES Evaluation Report

ESR-2074*

Reissued December 1, 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™ STACKING 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® 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® 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.

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. The SmartVENT™ Stacking Model #1540-511 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 #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

*Revised July 2013



concrete walls up to 12 inches (305 mm) thick. In order to comply with the engineered opening design principle noted in Section 2.6.2.2 of ASCE/SEI 24, the Smart Vent® AFFVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one AFFV 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 AFFV for every 400 square feet (37.2 m²) of enclosed area.
- Below the base flood elevation.
- With the bottom of the AFFV located a maximum of 12 inches (305.4 mm) above grade.

5.0 CONDITIONS OF USE

The Smart Vent[®] AFFVs 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® AFFVs 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® AFFVs 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 Automatic Foundation Flood Vents (AC364), dated October 2007.

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).

Engineered Flood Openings Certificate To satisfy requirements of the National Flood Insurance Program

This certification must be submitted to, and kept on file by, the local jurisdiction's permit authority. A copy should be retained by the owner to demonstrate compliance in order to receive the best flood insurance rating.

The Smart VENT® and Flood VENT™ Foundation Flood Vent is certified as meeting the flood opening requirements for engineered openings as set forth in the Federal Emergency Management Agency's National Flood Insurance Program regulations (44 CFR 60.3(c)(3)) and ASCE 24-98, provided it is installed according to the those references, as summarized below. Flood openings are required in enclosures below elevated buildings, attached and detached garages, and accessory structures that meet the required limitations. For a copy of the report documenting this certification dated June 21, 2002, and a copy of the National Evaluation Service report NER 624, contact Smart VENT, Inc., at 877/441-8368 or visit.

www.smartvent.com

I do hereby certify that the Smart VENT® Louvered Foundation Flood Vent and the FloodVENTTM Insulated Foundation Flood Vent opening (s) is designed for installation in buildings, will allow for the automatic equalizing of hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater during floods up to and including the base (100-year) flood. One Smart VENT® or one FloodVENTTM for every 200 Sq.Ft. of enclosed area will provide sufficient hydrostatic pressure equalization during a flood provided the installation limitations and instructions are followed as listed below. To Calculate the required number of Smart VENTS® or FloodVENTSTM divide the Square Feet of enclosed area by 200.

Example: A 2000 Sq.Ft. enclosed area requires 10 vents. 2000 Sq.Ft / 200 = 10 Vents

Signature

Title

SENIOR PROJECT ENGINEER

Type of License Registered Professional Engineer

License Number

OS 6171-E

*Project Name

*Project Address

*Project Address

*Date Submitted

8-28-2013

Required Fields

Professional Seal

Installation Limitations and Instructions

- The Smart VENT® or FloodVENT™ unit provides sufficient automatic equalization of hydrostatic pressure on walls and foundations of buildings located in flood hazard areas where the rate of rise is expected to be less than or approximately 5 feet per hour.
- Enclosed areas below otherwise elevated buildings, non-elevated attached and detached garages, and certain non-elevated
 accessory structures located in flood hazard areas are to be used solely for parking of vehicles, building access, or storage.
- 3. Each enclosed area shall have at least two flood openings, installed on different sides of the enclosed area.
- 4. The bottom of the flood openings shall be no more than one foot above the adjacent finished ground level.
- Installation must be in accordance with manufacturer's instructions.

"REFERENCE ONLY" From FEMA TB 1-93 Guidance for Engineered Openings

Openings in Foundation Walls

National Flood Insurance Program (NFIP) Technical Bulletin TB 1-93

"In situations where it is not feasible or desirable to meet the openings criteria stated previously, a design professional (registered engineer or architect) may design and certify openings. This section provides guidance for such engineered designs. For openings not meeting all four requirements for non-engineered openings listed on page 2 and 3 of TB 1-93, certification by a registered professional engineer or architect is required. Such certification must be submitted to, and kept on file by, the community. These certifications must assure community officials that the openings are designed in accordance with accepted standards of practice. A certification may be affixed to the design drawings or submitted separately. It must include appropriate certification language, and the name, title, address, signature, type of license, license number, and professional seal of the certifier." (TB 1-93 is available through Smart VENT® or online at www.fema.gov)

Form: SMRT100 Rev.A

This form is the property of Smart VENT Inc. Modification or Duplication is Strictly Prohibited without authorization.