J.S. PEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY National Flood Insurance Program

ELEVATION CERTIFICATE

0MB No. 1660-0008

Important: Read the instructions on pages 1-9.

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	NAME			A – PROPERTY INF	ORM	ATION	FORM			
A1. Building Owner's Nam	A1. Building Owner's Name WILLIAM J & ANN L CANTWELL									
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. #107 NORTH 31 st AVENUE										
City BOROUGH OF I	ONGPORT			State NJ ZIP C	ode 0	8403		· ·		
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) BLOCK 76 LOT 4							Jl	JN 15 2015		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL A5. Latitude/Longitude: Lat. 39.3189 Long74.5241 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 7 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 9* c) Total net area of flood openings? 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? A9. For a building with an attached garage: a) Square footage of attached garage within 1.0 foot above adjacent grade ye within 1.0 foot above adjacent grade N/A c) Total net area of flood openings? A9. For a building with an attached garage of attached garage within 1.0 foot above adjacent grade ye within 1.0 foot above adjacent grade N/A b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade ye within 1.0 foot above adjacent grade N/A c) Total net area of flood openings? C) Total net area of flood openings? D) Yes No										
d) Engineered flood of		Yes No	INSII	RANCE RATE MAP						
	SEC	HON B - FLOOD	114301	VANCE KATE WAF	(i iixi	WI) IN CRIMATIO				
B1. NFIP Community Name BOROUGH OF LONGPOR		lumber		ounty Name NTIC COUNTY			B3. State	•		
B4. Map/Panel Number 345302/ 0001	B5. Suffix	B6. FIRM Index I		B7. FIRM Panel Effective/Revised D 08/15/1983	ate	B8. Flood Zone(s) A8**		ase Flood Elevation(s) (Zone O, use base flood depth) 10**		
110. 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:										
311. Indicate elevation datu	ım used for BFE	in Item B9: X NG	VD 1929	9 NAVD 198	88	☐ Other/Source:				
12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☑ No Designation Date:										
SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)										
1. 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. 2. 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 items a) through h) below. ☒ NGVD 1929 ☐ NAVD 1988 ☐ Other/Source:										
Datum used for building elevations must be the same as that used for the BFE. Che						Check	ck the measurement used.			
a) Top of bottom floor (including basement, crawlspace, or enclosure floor) b) Top of the next higher floor c) Bottom of the lowest horizontal structural member (V Zones only) d) Attached garage (top of slab) e) Lowest elevation of machinery or equipment servicing the building					-	☐ feet☐ fee	☐ meters ☐ meters ☐ meters ☐ meters ☐ meters ☐ meters			
(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) 6.6 6.8							⊠ feet ⊠ feet	☐ meters ☐ meters		
h) Lowest adjacent grad	le at lowest eleva	ation of deck or stair	s, includ	ding structural support	<u>N/A</u> .	-		☐ meters		
SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION										
This certification is to be signiformation. I certify that the I understand that any false	e information on statement may b	this Certificate repre e punishable by fine	sents m or imp	ny best efforts to interp risonment under 18 U.	ret the S. Cod	data available. de, Section 1001.				
 ☑ Check here if comments are provided on back of form. ☑ Check here if attachments. ☑ Were latitude and longitude in Section A provided by licensed land surveyor? ☑ Yes ☑ No 						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	PLACE		
UCDC UCDC							HERE			
Settiner's Name Paul W. Roening, 1 Ed., of W										
Title Licensed Land Surveyor Company Name Paul H. Koelling & Associates, LLC-coa24GA28133100 Address 2161 Shore Road City Linwood State NJ ZIP Code 08221										
Signature Signature			_ ,			927-0279				
Signature		Date 6-10-	15	relephone	(600)	321-0213				

LLLVAIION OLIVIII IOAIL, Paye & IMPORTANT: In these spaces, copy the corresponding information from Section A. EGRUNSULANGE COMPANYOUSE Building Street Address (including Apt., Unit, Suite, and/or Bldg, No.) or P.O. Route and Box No. #107 NORTH 31st AVENUE City BOROUGH OF LONGPORT e angany NAIC NUMBER State N.I ZIP Code 08403 SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED) Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner. *A8b.) Smart Vents Model #1540-510 engineered for 200 square inches of net area (see attached) **B8 & B9.) FEMA Pre-Firm Zone "AE".....Base Flood Elevation 9 ft. (NAVD88) converted = 10.3 ft. (NGVD29) ***C2a.) crawlspace enclosure ****.C2a.) ductwork (elev 11.4).....exterior air units (elev 13.7)..... Date Signature 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 check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG). a) Top of bottom floor (including basement, crawlspace, or enclosure) is _ ☐ feet ☐ meters ☐ above or ☐ below the HAG. b) Top of bottom floor (including basement, crawlspace, or enclosure) is ____ ☐ feet ☐ meters ☐ above or ☐ below the LAG. E2. For Building Diagrams 6-9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8-9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is ☐ feet ☐ meters ☐ above or ☐ below the HAG. Attached garage (top of slab) is ☐ feet ☐ meters ☐ above or ☐ below the HAG. Top of platform of machinery and/or equipment servicing the building is ____ Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? Yes No Unknown. The local official must certify this information in Section G SECTION F - PROPERTY OWNER (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's or Owner's Authorized Representative's Name City ZIP Code Address State Signature Date Telephone Comments Check here if attachments. SECTION G - COMMUNITY INFORMATION (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. 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.) A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO. G2. 🗌 G3. 🗌 The following information (Items G4-G10) is provided for community floodplain management purposes. G4. Permit Number G5. Date Permit Issued 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 (including basement) of the building: meters feet Datum G9. BFE or (in Zone AO) depth of flooding at the building site: ☐ feet meters Datum G10. Community's design flood elevation: feet meters Datum Local Official's Name Title Community Name Telephone Date Signature Comments Check here if attachments.

Building Photographs

	For Insurance Company Use:		
Building Street Address (including 107 N. 31st Ave.	Policy Number		
City	State	ZIP Code	Company NAIC Number
Longport	NJ	08403	

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View."





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 February 1, 2009

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

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 10—SPECIALTIES Section: 10230—Vents

REPORT HOLDER:

SMART VENT[®], INC. 450 ANDBRO DRIVE, SUITE 2B PITMAN, NEW JERSEY 08071 (856) 307-1468 <u>www.smartvent.com</u> eval@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 #1540-524; SMARTVENT™ OVERHEAD DOOR MODEL #1540-514

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[®] 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 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 concrete walls up to 12 inches (305 mm) thick. In order to