

DEPARTMENT OF HOMELAND SECURITY  
Federal Emergency Management Agency  
ELEVATION CERTIFICATE

IMPORTANT: FOLLOW THE INSTRUCTIONS ON PAGES 9-16

OMB Control Number: 16 60-0008  
Expiration: 11/30/2018

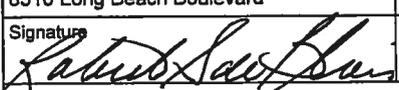
Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A - PROPERTY INFORMATION				FOR INSURANCE COMPANY USE	
A1. Building Owner's Name ROBERT & LOIS EHRMANN				Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 140 Lighthouse Drive				Company NAIC Number:	
City Waretown		State NJ		Zip Code 08758	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Lot 9, Block 102, TMS#15, Ocean Township, Ocean County, NJ					
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential					
A5. Latitude/Longitude: Lat. 39°48'.06" Long. 74°10'.53" Horizontal Datum: <input type="radio"/> NAD 1927 <input checked="" type="radio"/> 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 6					
A8. For a building with a crawlspace or enclosure(s):			A9. For a building with an attached garage:		
a) Square footage of crawlspace or enclosure(s)	1097	sq ft	a) Square footage of attached garage	N/A	sq ft
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade	6		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 in A8.b	1200	sq in	c) Total net area of flood openings in A9.b	N/A	sq in
d) Engineered flood openings?	<input checked="" type="radio"/> Yes <input type="radio"/> No		d) Engineered flood openings?	<input type="radio"/> Yes <input type="radio"/> No	
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number Ocean Township - 340518			B2. County Name Ocean		B3. State NJ
B4. Map/Panel Number 34029C0416	B5. Suffix F	B6. FIRM Index Date 9/29/2006	B7. FIRM Panel Effective/Revised Date 9/29/2006	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 6
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="radio"/> FIS Profile <input checked="" type="radio"/> FIRM <input type="radio"/> Community Determined <input type="radio"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="radio"/> NGVD 1929 <input checked="" type="radio"/> NAVD 1988 <input type="radio"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="radio"/> Yes <input checked="" type="radio"/> No Designation Date: <input type="radio"/> CBRS <input type="radio"/> OPA					
SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)					
C1. Building elevations are based on: <input type="radio"/> Construction Drawings* <input type="radio"/> Building Under Construction* <input checked="" type="radio"/> Finished Construction					
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. * A new Elevation Certificate will be required when construction of the building is complete.					
Benchmark Utilized: G.P.S. - TOPNET LIVE		Vertical Datum: 1988			
Indicate elevation datum used for the elevations in Items a) through h) below. <input type="radio"/> NGVD 1929 <input checked="" type="radio"/> NAVD 1988 <input type="radio"/> Other/Source: _____					
Datum used for building elevations must be the same as that used for the BFE.				Check the measurement used.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	4.6		<input checked="" type="radio"/> feet <input type="radio"/> meters		
b) Top of the next higher floor	14.2		<input checked="" type="radio"/> feet <input type="radio"/> meters		
c) Bottom of the lowest horizontal structural member (V Zones only)	N.A.		<input checked="" type="radio"/> feet <input type="radio"/> meters		
d) Attached garage (top of slab)	N.A.		<input checked="" type="radio"/> feet <input type="radio"/> meters		
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	9.4		<input checked="" type="radio"/> feet <input type="radio"/> meters		
f) Lowest adjacent (finished) grade next to building (LAG)	4.2		<input checked="" type="radio"/> feet <input type="radio"/> meters		
g) Highest adjacent (finished) grade next to building (HAG)	4.3		<input checked="" type="radio"/> feet <input type="radio"/> meters		
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	4.2		<input checked="" type="radio"/> feet <input type="radio"/> meters		

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ELEVATION CERTIFICATE

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SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION				
<p>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.</p>				
<input type="checkbox"/> Check here if attachments.		Were latitude and longitude in Section A provided by a licensed land surveyor? <input checked="" type="radio"/> Yes <input type="radio"/> No		
Certifier's Name Robert G. deBlois, PLS		License Number GS35357		
Title Professional Land Surveyor		Company Name Horn, Tyson & Yoder Inc.		
Address 8510 Long Beach Boulevard		City Long Beach Twp	State NJ	Zip Code 08008
Signature 		Date 1/15/2019	Telephone (609)492-5050	
Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.				
Comments (including type of equipment and location, per C2(e), if applicable)" DWELLING ON BANDED PILE FOUNDATION AIR CONDITIONER @ ELEV 9.7   HOT WATER HEATER @ ELEV 9.4   FURNACE @ ELEV 11.2   PANEL BOX @ ELEV 8.6 ELECTRIC METER @ ELEV 8.6   FOYER @ ELEV 9.6 (45 SQ FT)   BOTTOM OF BANDS @ ELEV 12.2 (6) ENGINEERED SMART VENTS ZONE AE BFE 7 ON PRELIMINARY FIRM 34029C0416G				
Signature 				Date 1/15/2019
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 _____		<input type="radio"/> feet <input type="radio"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.		
b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____		<input type="radio"/> feet <input type="radio"/> meters <input type="checkbox"/> above or <input type="checkbox"/> 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 _____				
E3. Attached garage (top of slab) is _____		<input type="radio"/> feet <input type="radio"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.		
E4. Top of platform of machinery and /or equipment servicing the building is _____		<input type="radio"/> feet <input type="radio"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.		
E5. 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? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> 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 or Owner's Authorized Representative's Name: _____				
Address _____		City _____	State _____	ZIP Code _____
Signature _____		Date _____	Telephone _____	
Comments          				
				<input type="checkbox"/> Check here if attachments.



**BUILDING PHOTOGRAPHS**

See instructions for Item A6

OMB Control Number: 1660-0008

Expiration: 11/30/2018

**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.

140 Lighthouse Drive

Policy Number:

City

Waretown

State

NJ

Zip Code

08758

Company NAIC

Number:

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 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." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.



1/15/2019



**BUILDING PHOTOGRAPHS**

Continuation Page

OMB Control Number: 1660-0008  
Expiration: 11/30/2018

**IMPORTANT: In these spaces, copy the corresponding information from Section A.** **FORM INSURANCE COMPANY USE**

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

Policy Number:

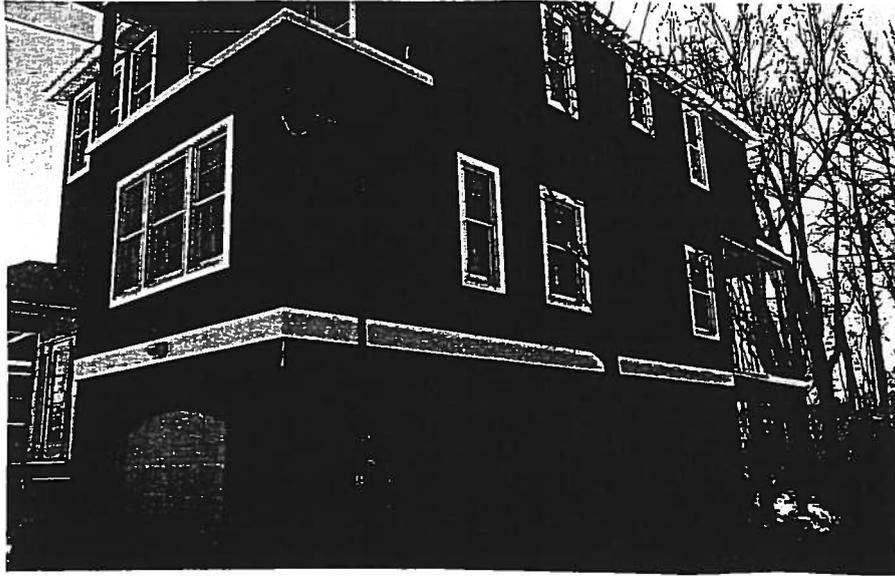
City  
**Waretown**

State  
**NJ**

Zip Code  
**08758**

Company NAIC Number:

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." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.



1/15/2019



# 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 62.3(e)(5)) 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 877/441-1368 or visit

[www.smartvent.com](http://www.smartvent.com)

I do hereby certify that the Smart VENT® Louvered Foundation Flood Vent and the FloodVENT™ 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 FloodVENT™ 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 FloodVENTS™ divide the Square Feet of enclosed area by 200.

Example: A 2000 Sq.Ft. enclosed area requires 10 vents.  $2000 \text{ Sq.Ft} / 200 = 10 \text{ Vents}$

Signature *Robert Ehrmann*  
 Title Professional Engineer  
 Type of License Professional Engineering  
 License Number NJ PE GE26637



Professional Seal

\*Project Name ROBERT & LOIS EHRMANN  
 \*Project Address 140 Lighthouse Drive  
 \*Date Submitted \_\_\_\_\_  
 \*Required Fields \_\_\_\_\_

### Installation Limitations and Instructions

1. 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.
2. 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.
5. 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](http://www.fema.gov))

Form: SMRT100 Rev. A July 2002  
 This form is the property of Smart VENT, Inc. Modification or Duplication is Strictly Prohibited without authorization.



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# ICC-ES Evaluation Report

# ESR-2074

ICC-ES | (800) 423-6587 | (562) 699-0543 | [www.icc-es.org](http://www.icc-es.org)

Reissued 02/2017  
This report is subject to renewal 02/2019.

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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(WSSPC) Award in Excellence"*

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## ICC-ES Evaluation Report

## ESR-2074 CBC and CRC Supplement

Issued February 2017

Revised November 2017

This report is subject to renewal February 2019.

[www.icc-es.org](http://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](http://www.smartvent.com)  
[info@smartvent.com](mailto: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 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, recognized in ICC-ES master evaluation report ESR-2074, have also been evaluated for compliance with codes noted below.

#### Applicable code edition:

- 2016 California Building Code (CBC)
- 2016 California Residential Code (CRC)

### 2.0 CONCLUSIONS

#### 2.1 CBC:

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2074, comply with 2016 CBC Chapter 12, provided the design and installation are in accordance with the 2015 *International Building Code*® (IBC) provisions noted in the master report and the additional requirements of CBC Chapters 12, 16 and 16A, as applicable.

The products recognized in this supplement have not been evaluated under CBC Chapter 7A for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area.

#### 2.2 CRC:

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2074, comply with the 2016 CRC, provided the design and installation are in accordance with the 2015 *International Residential Code*® (IRC) provisions noted in the master report.

The products recognized in this supplement have not been evaluated under 2016 CRC Chapter R337, for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area.

The products recognized in this supplement have not been evaluated for compliance with the International Wildland-Urban Interface Code®.

This supplement expires concurrently with the master report, reissued February 2017 and revised November 2017.

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