

# ELEVATION CERTIFICATE

**Important: Read the instructions on pages 1-9.**

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

## SECTION A - PROPERTY INFORMATION

<b>A1. Building Owner's Name</b> Wirthwhile Properties LLC	<b>FOR INSURANCE COMPANY USE</b>
<b>A2. Building Street Address</b> (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 106 Melrose Avenue	Policy Number:
City Neptune State NJ ZIP Code 07753	Company NAIC Number:
<b>A3. Property Description</b> (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Lot 17 Block 470	
<b>A4. Building Use</b> (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Residential</u>	
<b>A5. Latitude/Longitude:</b> Lat. <u>40.1918</u> Long. <u>-74.0401</u> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983	
<b>A6. Attach at least 2 photographs</b> of the building if the Certificate is being used to obtain flood insurance.	
<b>A7. Building Diagram Number</b> <u>6</u>	
<b>A8. For a building with a crawlspace or enclosure(s):</b>	<b>A9. For a building with an attached garage:</b>
a) Square footage of crawlspace or enclosure(s) <u>439</u> sq ft	a) Square footage of attached garage <u>467</u> sq ft
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>3</u>	b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>3</u>
c) Total net area of flood openings in A8.b <u>600</u> sq in	c) Total net area of flood openings in A9.b <u>600</u> sq in
d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

<b>B1. NFIP Community Name &amp; Community Number</b> Township of Neptune/340317		<b>B2. County Name</b> Monmouth		<b>B3. State</b> NJ	
<b>B4. Map/Panel Number</b> 34025C0334/0333	<b>B5. Suffix</b> F	<b>B6. FIRM Index Date</b> 09/25/2009	<b>B7. FIRM Panel Effective/Revised Date</b> 09/25/2009	<b>B8. Flood Zone(s)</b> AE	<b>B9. Base Flood Elevation(s)</b> (Zone AO, use base flood depth) 9

**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:**  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

## SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

**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: GPS Vertical Datum: NAVD 88


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.

		Check the measurement used.
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	<u>6.3</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
b) Top of the next higher floor	<u>15.4</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only)	<u>N/A</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
d) Attached garage (top of slab)	<u>6.3</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	<u>12.0</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG)	<u>6.1</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG)	<u>6.6</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	<u>6.0</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters

## SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

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.

Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No  
 Check here if attachments.

Certifier's Name Robert H. Morris		License Number 30090	
Title Land Surveyor	Company Name R H Morris Land Surveying		
Address 1123 Morris Avenue	City Point Pleasant	State NJ	ZIP Code 08742
Signature 	Date 9/04/15	Telephone 732-899-4387	


ELEVATION CERTIFICATE, page 2

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>		FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 106 Melrose Avenue		Policy Number:
City Neptune	State NJ ZIP Code 07753	Company NAIC Number:

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.

Comments C2.e) = Furnace. Flood vents are SmartVent Model Nos. 1540-570 & 1540-510.  
The Preliminary Flood Zone is AE. The Preliminary Base Flood Elevation is 10' per Preliminary FIRM 34025C0333G released 1/31/14.

Signature  Date 9/04/15

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.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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 \_\_\_\_\_

Address	City	State	ZIP Code
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.

- G1.  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.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- 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: \_\_\_\_\_  feet  meters 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
Signature	Date
Comments	

Check here if attachments.

# Building Photographs

See Instructions for Item A6.

**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.  
106 Melrose Avenue

Policy Number:

City Neptune

State NJ

ZIP Code 07753

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.



Front View 9/04/15



Rear View 9/04/15



Most Widely Accepted and Trusted

# ICC-ES Report

## ESR-2074

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

Reissued 02/2015

This report is subject to renewal 02/2017.

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



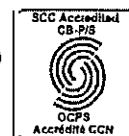
Look for the trusted marks of Conformity!

*"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"*



A Subsidiary of

*ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.*





**ICC-ES Evaluation Report****ESR-2074\***

Reissued February 2015

This report is subject to renewal February 2017.

[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 EVALUATION SCOPE****Compliance with the following codes:**

- 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

**Properties evaluated:**

- Physical operation
- Water flow

**2.0 USES**

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

**3.0 DESCRIPTION****3.1 General:**

When subjected to rising water, the Smart Vent® FVs internal floats are activated, 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 FV 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 door to rotate out of the way and allow flow.

The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. 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 FVs 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 FVs must be installed in accordance with Section 4.0.

**3.3 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 mm<sup>2</sup>) 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 mm<sup>2</sup>) of net free area to supply natural ventilation. Other FVs recognized in this report do not offer natural ventilation.

**4.0 DESIGN AND 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 masonry and 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® FVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square feet (18.6 m<sup>2</sup>) 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 FV for every 400 square feet (37.2 m<sup>2</sup>) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final

\*Revised July 2015

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



grade or floor and finished exterior grade immediately under each opening.

## 5.0 CONDITIONS OF USE

The Smart Vent® FVs 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® FVs 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® FVs 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 Mechanically Operated Flood Vents (AC308), dated October 2013 (editorially revised May 2014).

## 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).

TABLE 1—MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT®	1540-510	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
FloodVENT® Overhead Door	1540-524	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Overhead Door	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent® Stacker	1540-521	16" X 16"	400

For SI: 1 Inch = 25.4 mm; 1 square foot = m<sup>2</sup>

# ELEVATION CERTIFICATE

IMPORTANT: Follow the instructions on pages 1-9.

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

## SECTION A - PROPERTY INFORMATION

FOR INSURANCE COMPANY USE	
A1. Building Owner's Name Lambert, John H JR. & Newland, Lee Ann	Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 108 Hillcrest Avenue	Company NAIC Number:
City Township of Neptune State NJ ZIP Code 07753	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Tax Lots 11, 12, 13 & 14; Block 471	
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential	
A5. Latitude/Longitude: Lat. 40°11'33.2"N Long. N 74°02'25.4"W Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> 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):	A9. For a building with an attached garage: n/a
a) Square footage of crawlspace or enclosure(s) 1963 sq ft	a) Square footage of attached garage sq ft
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 9	b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade
c) Total net area of flood openings in A8.b ***2250 sq in	c) Total net area of flood openings in A9.b sq in
d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No

## SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number Neptune, Township of 340317		B2. County Name Monmouth county		B3. State New Jersey	
B4. Map/Panel Number 34025C0333	B5. Suffix F	B6. FIRM Index Date 09/25/2009	B7. FIRM Panel Effective/Revised Date 09/25/2009	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 9.0' NAVD 1988
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: ____/____/____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

## SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

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: NJNT CORS Vertical Datum: NAVD 1988

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.

Check the measurement used.

a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	7 . 1	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
b) Top of the next higher floor	13 . 6	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only)	n . /a	<input type="checkbox"/> feet <input type="checkbox"/> meters
d) Attached garage (top of slab)	n . /a	<input type="checkbox"/> feet <input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	**12 . 9	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG)	6 . 2	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG)	7 . 2	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	6 . 1	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters

## SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

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.

- Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No
- Check here if attachments.

Certifier's Name Frank J. Barlowski, NJPLS	License Number 24GS03973500
Title Prof. Land Surveyor	Company Name Matrix New World Engineering, Inc.
Address 442 State Route 35, 2nd Flr	City Eatontown
State NJ	ZIP Code 07724
Signature <i>Frank J. Barlowski</i>	Date 6-1-15
Telephone (732) 588-2999	

PLACE SEAL HERE

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (Including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 108 Hillcrest Avenue			Policy Number:
City Township of Neptune	State NJ	ZIP Code 07753	Company NAIC Number:

**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.

Comments Per the (Preliminary) Flood Insurance Rate 34025C0339G Map Rev., Preliminary Date: 1/31/2015 property is located in Flood Zone AE Base Flood Elevation = 10.0' (NAVD 88)  
 \*\*NOTE: C2e Top of timber platform for proposed AC condenser unit, Elev. 12.9' (NAVD88)  
 This certificate was prepared based on existing conditions as of May 29, 2015. No machinery or equipment was observed below Elev. 12.9' (NAVD88)  
 \*\*\*NOTE: On Page One, the sq. in. area shown for A8c is actually the maximal total of enclosed area that can be served by the total number of engineered openings in sq. ft.: A8b 9 x 250 = A8c=2250 sq. ft. (based on USA Flood Air Vents)

Signature *Paul J. Dan...* Date 6-1-15

**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.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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 or Owner's Authorized Representative's Name \_\_\_\_\_

Address _____	City _____	State _____	ZIP Code _____
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.

- G1.  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.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3.  The following information (Items G4–G9) 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: \_\_\_\_\_  feet  meters 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 _____
Signature _____	Date _____

Comments \_\_\_\_\_

Check here if attachments.

See Instructions for Item A6.

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or R.O. Route and Box No. 108 Hillcrest Avenue			Policy Number:
City Township of Neptune	State NJ	ZIP Code 07753	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.



Front View of House (Looking Southerly)



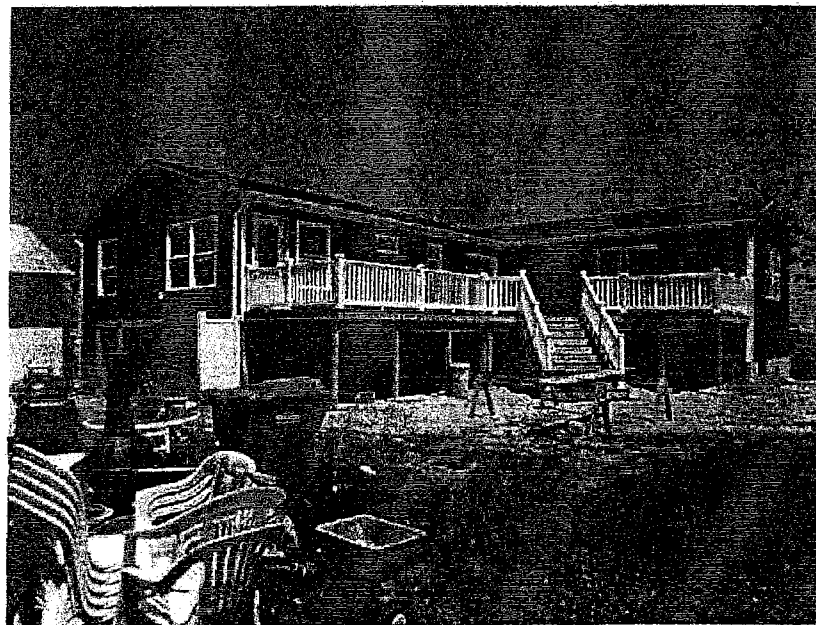
Front and East Side View of House (Looking Southerly)

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or R.O. Route and Box No. 108 Hillcrest Avenue			Policy Number:
City Township of Neptune	State NJ	ZIP Code 07753	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.



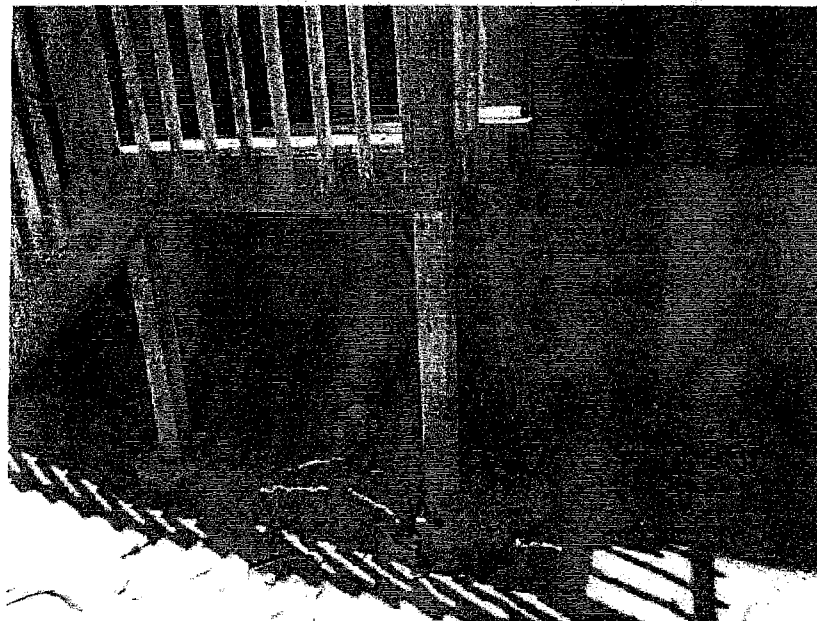
Front and West Side View of House (Looking Southerly)



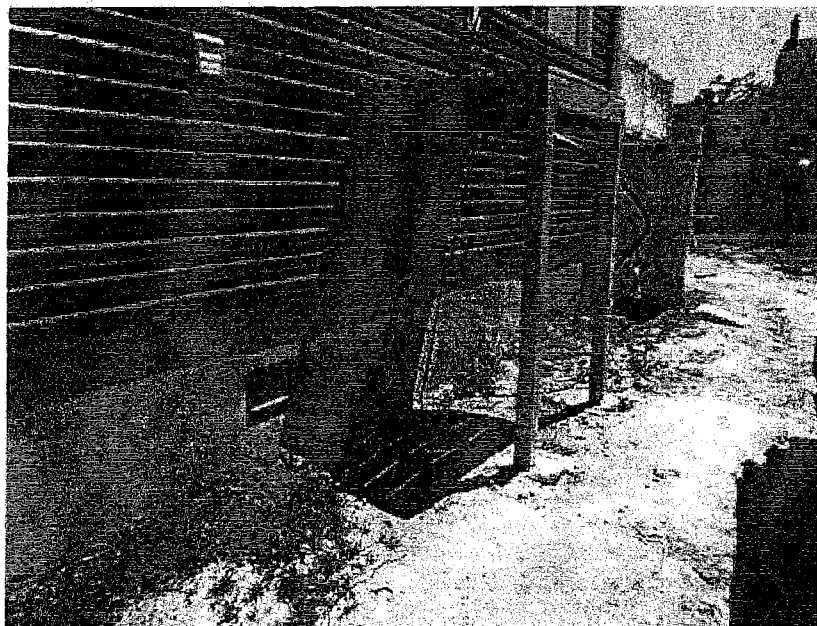
Rear Side View of House (Looking Northeasterly)

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 108 Hillcrest Avenue			Policy Number:
City Township of Neptune	State NJ	ZIP Code 07753	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.



USA Flood Air Vents



Top of Timber Platform for proposed AC condenser Unit  
Elev.= 12.9' (NAVD 1988)



CERTIFICATION OF COMPLIANCE

PROJECT NAME Lambert, John H JR. & Newland, Lee Ann DATE May 29, 2015

ADDRESS 108 Hillcrest Avenue

TOWN Township of Neptune STATE NJ ZIP 07753

Home Land Security - FEMA - NFIP - TECH Bulletin 1-93 requirements for engineered openings in foundation walls for FEMA TB 1-93 openings in foundation walls USA FLOOD/AIR VENT will allow for the automatic equalization of hydrostatic flood forces and pressure during flooding as well for base 100 year flood or 1% chance of flooding in FEMA (F.I.R.M. - Federal Insurance Rate Map) in "A" zone type properties. Additional information to meet FEMA / NFIP requirements for flood venting in foundation walls can be found in TB 1-93. I.C.C. (International Code Council) requires a minimum 3" diameter opening to be maintained during flooding to allow passage of debris through flood vent. Additional copies of Certificate of Compliance should be made available to local code official / architect / engineer / surveyor / insurance broker / real estate agent / property owner to show compliance with FEMA/NFIP/ICC.

It is certified that USA FLOOD/AIR FOUNDATION FLOOD VENTS opening are designed for installation in buildings to meet the FEMA, NFIP, ICC code requirements for the 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 USA FLOOD/AIR VENT, with its single door and frame or double door and frame, will provide sufficient hydrostatic pressure equalization during a flood. Each or 1 vent will cover 250 square feet of enclosed building area as per FEMA, NFIP or ICC instructions and calculations.

The Flexible Elastomeric flap attached to bottom of the bidirectional door has a 40 to 50 Durometer Shore A reading set for a 10 to 15 pound per square foot release at a temperature of -20°F to 80°F.

**Thomas Barresi, Mechanical Engineer, Triangle Rubber, New York**

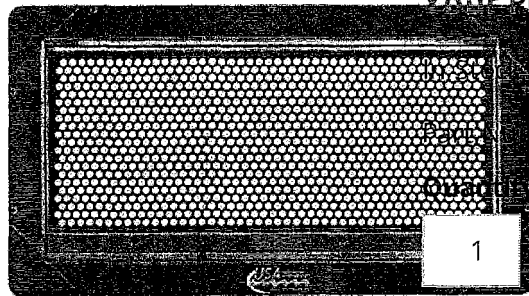




Home > Standard Flood & Air Vents > Flood Air Stainless Steel Vent with Perforated Door

## Flood Air Stainless Steel Vent with Perforated Door

Your Price: \$149.00



Number: FASS (FA-316)

Add to Cart



MY ACCOUNT ▾



Account Login

This model will fit into a rough opening of 8 inches x 16 inches

Email this page to a friend

### INFORMATION

Home

Products

Contact

### Description

- **Marine grade material fabrication:** 18 Gauge (.048" thick) .050" 5052-H32 a Gauge (.074" thick) .080" 5052-H32 aluminum vent door
- **Rough opening** 8" x 16"
- **Outer frame** 10" x 18"
- **Inner frame** 7 15/16" x 15 7/8"
- **Installation:** Ideal for poured and block walls; fits into an opening the size
- **Coverage per vent:** 250 square feet (enclosed area)
- Perforated door provides air ventilation in a crawl space to increase air flow protection.
- Operation of vent is based on hydrostatic pressure.
- Engineered openings are designed to provide the equalization of hydrostat

### BROWSE BY CATEGORY

Standard Flood Vents

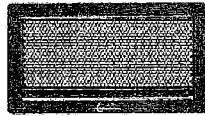
Standard Flood & Air Vents

Retrofit Vents

walls by allowing for the automatic entry and exit for floodwaters.

- A minimum of two bi-directional vents are required for enclosed flood expc installed on opposite or adjacent walls.
- Meets FEMA, NFIP, ICC & ASCE requirements for engineered openings.
- Water/Air/Mold (WAM) protection.

## Related Items



Aluminum Flood Vent with  
Perforated Door

**\$119.00**

Buy



Retrofit Aluminum Powder Coated  
Vent

**\$96.00**

Buy



Flood Only Aluminum Vent

**\$119.00**

Buy



Retrofit Stainless Steel Flood Vent

**\$135.10**

Buy



Flood Only Stainless Steel Vent

6/3/2015

Flood Air Stainless Steel Vent with Perforated Door

**\$149.00**

Buy

---

+ MENU

Thank You!

Terms and Conditions

---

Copyright 2015 USA Flood Air Vents. All Rights Reserved. eCommerce Software by 3dcart.

**NOTES:**

1. KNOWN AND DESIGNATED AS LOTS 11, 12, 13 & 14, BLOCK 471 AS SHOWN ON THE CURRENT TAX ASSESSMENT MAPS OF THE TOWNSHIP OF NEPTUNE, MONMOUTH COUNTY, NEW JERSEY, TAX SHEET NO. 43.02, ALSO KNOWN AS LOTS 11, 12, 13 & 14 BLOCK 20 AS SHOWN ON THE MAP REFERENCED HEREIN.
2. HORIZONTAL DATUM - NAD1983 AND VERTICAL DATUM - NAVD 1988. BASED ON GPS OBSERVATIONS BY MATRIX NEW WORLD ENGINEERS, INC. ON MAY 29, 2015 AND REFERRING TO LEICA SMARTNET CONTINUOUSLY OPERATING REFERENCE STATION (CORS) NETWORK, NATIONAL GEODETIC SURVEY MONUMENT: CORS STATION "HANT", (960-067149).
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE INSURANCE COMMITMENT OR POLICY AND IS SUBJECT TO ANY EASEMENTS OF RECORD AND ANY OTHER PERTINENT FACTS THAT A COMPLETE TITLE SEARCH MIGHT REVEAL. IT IS STRONGLY SUGGESTED THAT A TITLE COMMITMENT BE PROVIDED TO THE SURVEYOR FOR REVIEW PRIOR TO THE PLACEMENT OF OR ALTERATION TO IMPROVEMENTS ON THE SUBJECT PROPERTY.
4. SUBJECT TO THE RIGHTS AND RESTRICTIONS OF ALL EASEMENTS, ORDINANCES, COVENANTS AGREEMENTS AND/OR RESTRICTIONS BEING WITHIN AND/OR CROSSING THE SURVEYED BOUNDS AS SHOWN, IF ANY.
5. SUBJECT TO THE RIGHTS OF UTILITY COMPANIES, IF ANY.
6. MATRIX NEW WORLD ENGINEERING, INC. MAKES NO WARRANTIES THAT ALL UNDERGROUND UTILITIES ARE SHOWN HEREON AND THAT THE EXACT LOCATIONS OF THE UNDERGROUND UTILITIES INDICATED ON THIS SURVEY ARE APPROXIMATE. ALL UTILITY LOCATIONS MUST BE VERIFIED WITH THE PROPER UTILITY COMPANIES PRIOR TO DESIGN, EXCAVATION OR CONSTRUCTION.
7. AT THE TIME AND DATE OF THIS SURVEY PORTIONS OF THE PROPERTY WERE UNDER CONSTRUCTION. THIS SURVEY REFLECTS CASTING CONDITIONS AS OF MAY 29, 2015.
8. AT THE TIME AND DATE OF THIS SURVEY THE LOWEST ENCLOSED FLOOR WAS DRY AND GRAVEL (ELEV. = 7.1' NAVD 1988).
9. INTERNAL TAX MAP LOT LINES WITHIN SUBJECT BOUNDARY ARE NOT SHOWN.

**MAP REFERENCE:**

\*MAP OF SECTION 8, SHARK RIVER HILLS, PROPERTY OF THE SHARK COMPANY HILLS CO., MONMOUTH COUNTY, N.J., FILED BY THE MONMOUTH COUNTY CLERK'S OFFICE ON JANUARY 31, 1928 AS FILED MAP CASE # 21-4.

**DEED REFERENCE:**

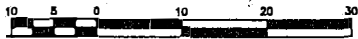
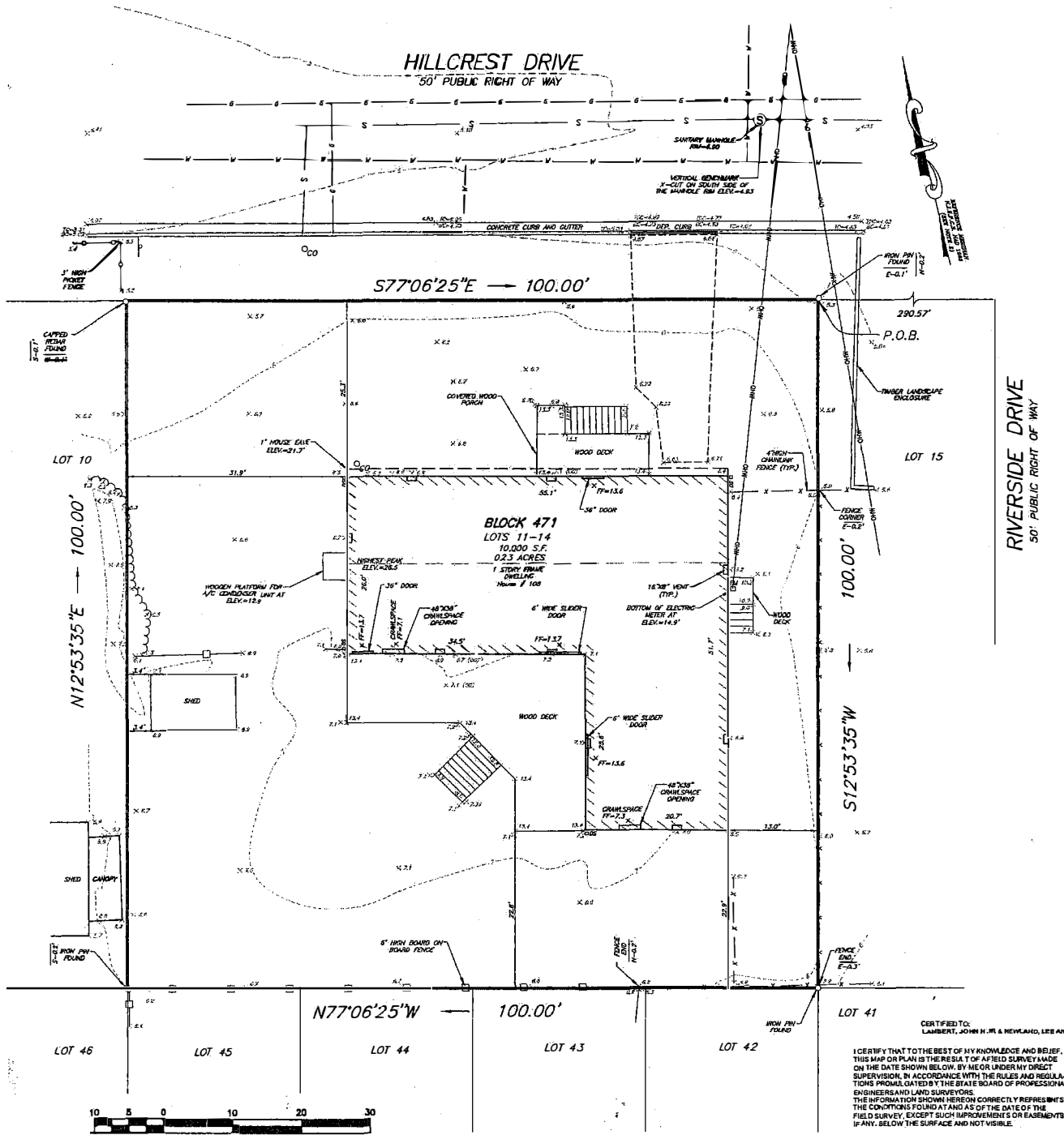
BOOK 09711, PAGE 428

**FEMA FLOOD NOTES**

THE SUBJECT PROPERTY IS LOCATED WITHIN THE FOLLOWING SPECIAL FLOOD HAZARD ARE AS PER THE FIRM FLOOD INSURANCE RATE MAP:  
 FIRM FLOOD INSURANCE RATE MAP MONMOUTH COUNTY, NEW JERSEY (ALL JURISDICTIONS) PANEL 333 OF 457 CONTAINS NEPTUNE, TOWNSHIP OF MAP NUMBER 34025C0333, EFFECTIVE DATE: SEPTEMBER 25, 2006.  
 ZONE AE - BASE FLOOD ELEVATIONS DETERMINED, (EL. 8.00) M.A.V.D. 1988  
 FIRM FLOOD INSURANCE RATE MAP, MONMOUTH COUNTY, NEW JERSEY (ALL JURISDICTIONS) PANEL 333 OF 457 CONTAINS NEPTUNE, TOWNSHIP OF PRELIMINARY JANUARY 30, 2010 MAP NO. 34025C0333G, MAP REVISED.  
 FLOOD ZONE AE - (EL. 10.00) M.A.V.D. 1988  
 THE ABOVE PRELIMINARY FLOOD HAZARD DATA WAS OBTAINED ON MAY 29, 2015 FROM THE FEMA "FLOOD HAZARD RESOURCES MAP" WEBSITE:  
<http://hazards.fema.gov/femaportal/prelim.html>

**LEGEND**

- P.O.B. POINT OF BEGINNING
- (GR) AS PER DEED REFERENCE
- BOUNDARY COURSE DIRECTION
- WATER LINE
- GAS LINE
- EDGE OF PAVEMENT
- S SANITARY HANGOUT
- OHV OVERHEAD WIRES
- CHANGING FENCE
- STOCKED/BOARD ON BOARD FENCE
- TREELINE
- DOWN SPOUT
- ELCTRIC METER
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- X 7.1-8.02 TOP OF WALL
- X 4.1 SPOT GRADE
- FF FINISHED FLOOR GRADE
- 1/6 GROUND SHOT



GRAPHIC SCALE;  
1 inch=10 feet

I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP OR PLAN IS THE RESULT OF A FIELD SURVEY MADE ON THE DATE SHOWN BELOW BY ME OR UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH THE RULES AND REGULATIONS PROMULGATED BY THE STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS. THE INFORMATION SHOWN HEREON CORRECTLY REPRESENTS THE CONDITIONS FOUND AT AND AS OF THE DATE OF THE FIELD SURVEY, EXCEPT SUCH IMPROVEMENTS OR EASEMENTS, IF ANY, BELOW THE SURFACE AND NOT VISIBLE.

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN A RAISED IMPRESSION SEAL, OF THE PROFESSIONAL ENGINEER, IT IS NOT AN AUTHORIZED ORIGINAL DOCUMENT AND MAY HAVE BEEN ALTERED.

DESIGNED BY:	JD
CHECKED BY:	BJ
RELEASED BY:	BJ
DATE:	5-1
NO.	
DESCRIPTION:	REVISIONS

**FRANK J. BARLOWSKI, P.L.S.**  
 NEW JERSEY PROFESSIONAL LAND SURVEYOR  
 LICENSE NO. ZAG693975500

*Frank Barloski*  
 S.P.L.S.  
 DATE

**MATRIXNEWORLD**  
 Engineering Progress

Matrix New World Engineering, Inc.  
 642 State Route 35, Second Floor  
 WBE/DBE/DBE  
 NEW JERSEY, CERTIFICATE OF AUTHORIZATION No. 2404786200

File: 752-588-2999  
 www.matrixnewworld.com

**FINAL**  
 BOUNDARY AND TOPOGRAPHIC SURVEY

108 HILLSIDE AVENUE  
 (JOHN LAMBERT)  
 TAX LOTS 11, 12, 13 & 14 BLOCK 471  
 TOWNSHIP OF NEPTUNE  
 MONMOUTH COUNTY, NEW JERSEY

PROJECT NUMBER: LD14-421  
 DATE: 6/29/16  
 SCALE: 1" = 10'  
**PHASE AT5**  
 SHEET 1 of 1

# ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

## SECTION A - PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

Building Owner's Name Ellen Megill	Policy Number:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 106 Hillcrest Avenue	Company NAIC Number:
City Neptune Township State NJ ZIP Code 07753	

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)  
 Block 471 Lots 15-17

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential

A5. Latitude/Longitude: Lat. N40 11 33.0 Long. W74 02 24.3 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 Z

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s)	<u>1275</u> sq ft	A9. For a building with an attached garage:	a) Square footage of attached garage	<u>0</u> sq ft
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade	<u>11</u>	b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade	<u>0</u>	
c) Total net area of flood openings in A8.b	<u>1738</u> sq in	c) Total net area of flood openings in A9.b	<u>N/A</u> sq in	
d) Engineered flood openings?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Model 1608-C	Engineered flood openings?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

## SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number Township Of Neptune 340317		B2. County Name Monmouth		B3. State NJ	
B4. Map/Panel Number 34025C0333	B5. Suffix F	B6. FIRM Index Date Sept. 25, 2009	B7. FIRM Panel Effective/Revised Date Sept. 25, 2009	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 9

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:  NGVD 1929  NAVD 1988  Other/Source: \_\_\_\_\_

B\* Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?  Yes  No  
 Designation Date: \_\_\_\_\_  CBRS  OPA

## SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

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: GPS observation Vertical Datum: NAVD1988  
 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.

		Check the measurement used.
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	<u>4.7</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
b) Top of the next higher floor	<u>12.9</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only)	<u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters
d) Attached garage (top of slab)	<u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	<u>12.6</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG)	<u>4.7</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG)	<u>5.4</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	<u>5.4</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters

## SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

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.

Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No

Check here if attachments.

Certifier's Name Robert M. Ragan	License Number NJ # 38977
Title Land Surveyor	Company Name Ragan Land Surveying, PC
Address 1913 Cottage Place	City Wall Township State NJ ZIP Code 07719
Signature	Date April 3, 2014 Telephone 732-280-7000

Robert M. Ragan  
 N.J. Lic. No. 38977  
 4-3-14



# Building Photographs

See Instructions for Item A6.

**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.

Policy Number:

100 Hillcrest Avenue

City Neptune Township

State NJ

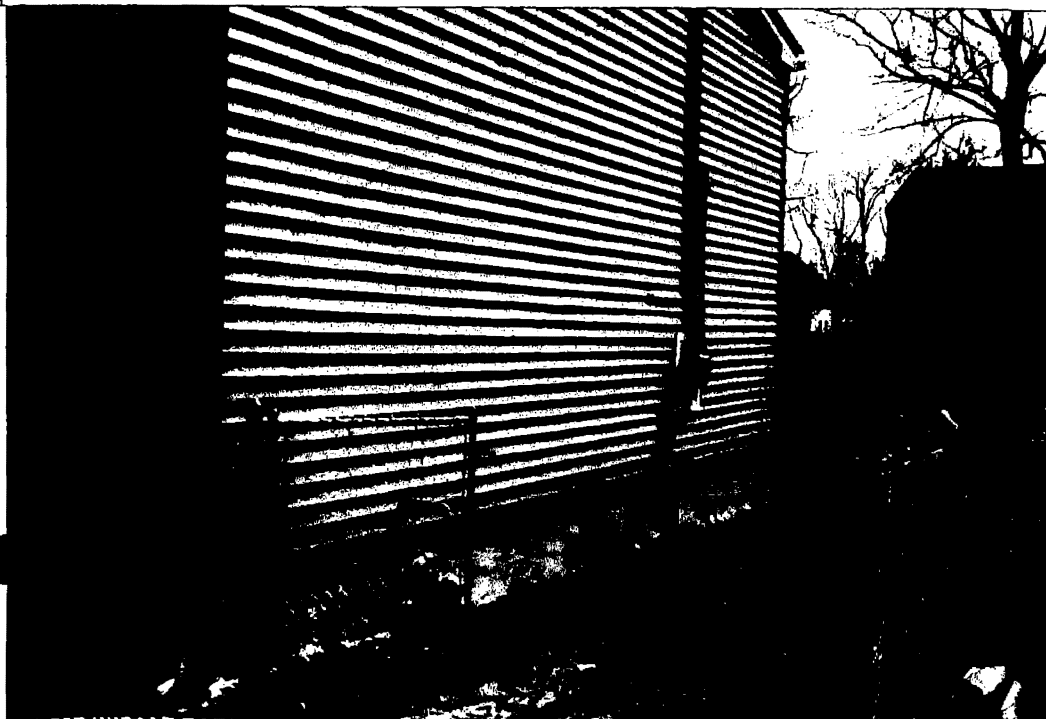
ZIP Code 07753

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.



*Front*



*Right  
Side*

4-3-14



# Building Photographs

Continuation Page

**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.

Policy Number:

6 Hillcrest Avenue

City Neptune Township

State NJ

ZIP Code 07753

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.



*Rear*



4-3-14

*Left  
Side*

# CERTIFICATION OF ENGINEERED FLOOD OPENINGS (FEMA TB-1 August 2008)

I do hereby certify that the **FLOOD SOLUTIONS LLC** Flood Vent properly installed and sized in accordance with Federal Emergency Management Agency's (FEMA's) National Flood Program regulations is designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for entry and exit of floodwater during floods up to and including the base 100-year flood.

I also do hereby certify that I calculated the Non Engineered Net Free Air and Engineered Opening size for each model and size of FLOOD SOLUTIONS LLC flood vents. The results of the calculations are recorded in the table below. The Engineered size opening calculation was performed using the formula in FEMA Technical Bulletin 1 - August 2008, Openings in Foundation Walls for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program (NFI) and ASCE/SEI 24-05, Flood Resistance Design and Construction. I measured the Non Engineered Net Free Air by calculating the minimum distance between the top blade and the top of the vent times the clear opening width of the vent; plus the minimum distance between the bottom blade and the bottom of the vent the clear opening width of the vent; plus the minimum distance between each blade times the number of spaces between the blades in vent times the clear opening width of the vent.

I used the formula in TB 1 - August 2008 ( $A^0 = 0.033 [1/C] R A_e$ ) to determine the Engineered Opening size for each model listed below. I used the following assumptions:  $A^0$  = total net area of openings required (in<sup>2</sup>); 0.033 = coefficient corresponding to a factor of safety of 5.0 (in<sup>2</sup> hr/ft<sup>2</sup>); c = 0.40 opening coefficient (ASCE 24 Table 2-3 "rectangular, long axis horizontal, short axis vertical unobstructed during design flood") or C = 0.35 (square unobstructed during design flood); R = 5 ft/hr worst case rate of rise and fall; and  $A_e$  = 1 ft<sup>2</sup> total enclosed area.

Note: When the horizontal dimension is twice or more the vertical dimension, use 0.4; as the dimensions approach a square, interpolate from 0.4 to 0.35.

$$A^0 / A_e = 0.033 [1/C] R = 0.033 [1/0.40 \text{ for rectangle, long axis horizontal}] 5 = 0.4125 \text{ in}^2 \text{ per ft}^2$$

$$\text{or } A^0 / A_e = 0.033 [1/C] R = 0.033 [1 / 0.35 \text{ for square}] 5 = .4719 \text{ in}^2 \text{ per ft}^2$$

Each individual opening, and any louvers, screens, or other covers, shall be designed to allow automatic entry and exit of floodwaters during design flood or lesser flood conditions; there shall be a minimum of two openings on different sides of each enclosed area; if a structure has more than one enclosed area below the DFE, each area shall have openings; openings shall not be less than 3 inches in any direction in the plane of the wall; the bottom of each required opening shall be no more than 1 ft. above the adjacent grade; the difference between the exterior and interior floodwater levels shall not exceed 1 ft. during base flood conditions; in the absence of reliable data on the rates of rise and fall, assume a rate of rise and fall of 5ft/hr; where data or analysis indicated more rapid rates of rise and fall, the total net area of the required openings shall be increased to account for the higher rates of rise and fall.

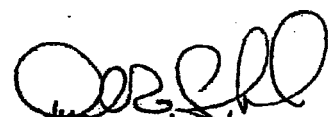
MODEL Number Flood Solutions:	SIZE of OPENING: (WIDTH X HEIGHT)	Net Free Air (square inches):	ENGINEERED OPENING Each vent covers: (square ft.)
1412-F	14" x 12"	67	145
1608-F	16" x 8"	51	124
1608-D	16" x 8"	51	124
1608-C	16" x 8"	65	158
1616-F	16" x 16"	104	221
1616-D	16" x 16"	102	216
2412-F	24" x 12"	113	274
2412-D	24" x 12"	110	267
2416-F	24" x 16"	156	362
2416-D	24" x 16"	154	357
3208-F	32" x 8"	104	252
3208-D	32" x 8"	104	252

SIGNATURE: \_\_\_\_\_

NAME: DANIEL G. FARABAUGH

TYPE OF LICENSE: PROFESSIONAL ENGINEER

STATE: NEW JERSEY LICENSE NUMBER: 24GE03649900



# ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

## SECTION A - PROPERTY INFORMATION

A1. Building Owner's Name ANGELA D'AGOSTINO		FOR INSURANCE COMPANY USE
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 2 BEVERLY WAY #102		Policy Number:
City NEPTUNE	State NJ	ZIP Code 07753
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) LOT 19.02, BLOCK 475		Elevated Compliant
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL		
A5. Latitude/Longitude: Lat. N 40deg11.639min Long. W74deg02.390min		Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> 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 Z		
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) 650 sq ft		a) Square footage of attached garage 235 sq ft
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 5		b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 2
c) Total net area of flood openings in A8.b 1000 sq in		c) Total net area of flood openings in A9.b 400 sq in
d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number NEPTUNE TWP. 340317		B2. County Name MONMOUTH		B3. State NJ	
B4. Map/Panel Number 34025C0333	B5. Suffix F	B6. FIRM Index Date 9/25/09	B7. FIRM Panel Effective/Revised Date 9/25/09	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 9

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:  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

## SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

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: LOCAL Vertical Datum: NAVD 1988  
 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.

Check the measurement used.

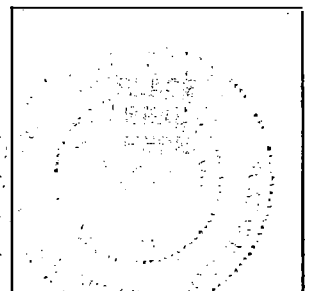
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	6.3	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
b) Top of the next higher floor	15.1	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only)	N.A	<input type="checkbox"/> feet <input type="checkbox"/> meters
d) Attached garage (top of slab)	6.2	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	15.9	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG)	5.8	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG)	5.9	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	5.8	<input type="checkbox"/> feet <input type="checkbox"/> meters

## SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

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.

Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No  
 Check here if attachments.

Certifier's Name MICHAEL T. CANNON License Number NJ PE LS 34691  
 Title PRESIDENT Company Name THE CANNON GROUP, PC  
 Address 100 JACK MARTIN BLVD. City BRICK State NJ ZIP Code 08724  
 Signature *Michael Cannon* Date 3/4/14 Telephone 732-458-0003



**ELEVATION CERTIFICATE, page 2**

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>		<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 102 BEVERLY WAY		Policy Number:
City NEPTUNE	State NJ	ZIP Code 07753
		Company NAIC Number:

**SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)**

By both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.  
 Comments PRELIMINARY WORK MAPS PLACE THE PROPERTY IN ZONE AE10, SMART VENT MODEL 1450/510

Signature *[Handwritten Signature]* Date 3/4/14

**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.
  - E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
  - E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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 \_\_\_\_\_

Address	City	State	ZIP Code
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.

- G1.  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.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- 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: \_\_\_\_\_  feet  meters 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
Signature	Date

Comments \_\_\_\_\_

Check here if attachments.

# Building Photographs

See Instructions for Item A6.

**IMPORTANT: In these spaces, copy the corresponding information from Section A.**

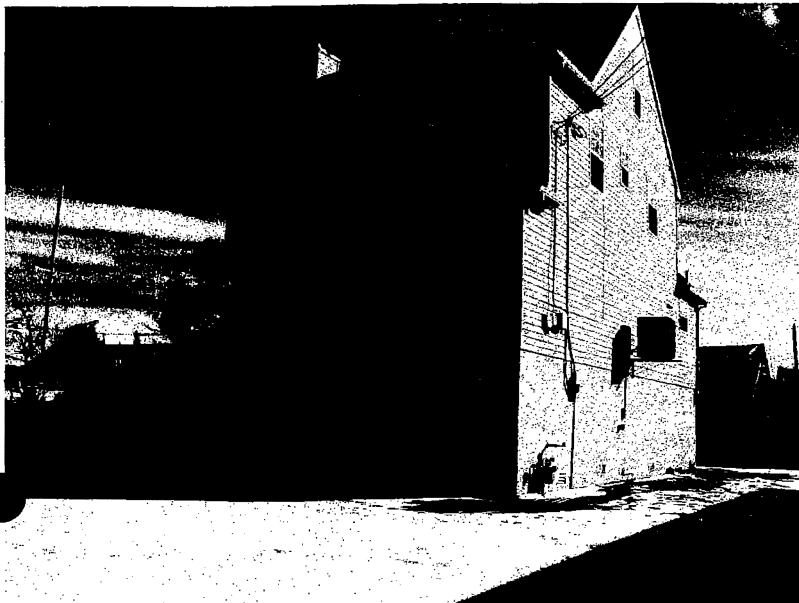
FOR INSURANCE COMPANY USE
Policy Number:
Company NAIC Number:

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

City NEPTUNE

State NJ ZIP Code 07753

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.



FRONT/WEST SIDE 3/4/14



FRONT/EAST SIDE 3/4/14

# Building Photographs

Continuation Page

**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.  
102 BEVERLY WAY

Policy Number:

City NEPTUNE

State NJ

ZIP Code 07753

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.



REAR/WEST SIDE 3/4/14



REAR/EAST SIDE 3/4/14

**ICC-ES Evaluation Report****ESR-2074\***

Reissued December 1, 2012

This report is subject to renewal February 1, 2015.

[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:  
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 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 15<sup>3</sup>/<sub>4</sub> inches wide by 7<sup>3</sup>/<sub>4</sub> 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 8<sup>3</sup>/<sub>4</sub> 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 mm<sup>2</sup>) 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 mm<sup>2</sup>) 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

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



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<sup>®</sup> 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 m<sup>2</sup>) 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 m<sup>2</sup>) 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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).



# ELEVATION CERTIFICATE

IMPORTANT: Follow the instructions on pages 1-9.

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

SECTION A - PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owner's Name <u>John S. Antman and Kelly A. McGuire</u>		Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <u>113 Fairview Place</u>		Company NAIC Number:
City <u>Neptune</u>	State <u>NJ</u>	ZIP Code <u>07753</u>
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) <u>Tax Lot 47 in Block 475</u>		<u>Compliant</u>
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Residential</u>		
A5. Latitude/Longitude: Lat. <u>40d 11m 37.11s N</u> Long. <u>74d 02m 26.47s W</u> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> 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 <u>7</u>		
A8. For a building with a crawlspace or enclosure(s):		A9. For a building with an attached garage: <u>NA</u>
a) Square footage of crawlspace or enclosure(s) <u>720</u> sq ft		a) Square footage of attached garage _____ sq ft
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>6</u>		b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____
c) Total net area of flood openings in A8.b <u>1,200</u> sq in		c) Total net area of flood openings in A9.b _____ sq in
d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFP Community Name & Community Number <u>Township Of Neptune 340317</u>			B2. County Name <u>Monmouth County</u>		B3. State <u>NJ</u>
B4. Map/Panel Number <u>34025C0333</u>	B5. Suffix <u>F</u>	B6. FIRM Index Date <u>09/25/2009</u>	B7. FIRM Panel Effective/Revised Date <u>09/25/2009</u>	B8. Flood Zone(s) <u>AE</u>	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) <u>9</u>
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ / _____ / _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)	
C1. Building elevations are based on: <input type="checkbox"/> Construction Drawings* <input type="checkbox"/> Building Under Construction* <input checked="" type="checkbox"/> 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: <u>GPS Opus</u> Vertical Datum: <u>NAVD 1988</u> Indicate elevation datum used for the elevations in items a) through h) below. <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> 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) <u>6.5</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
b) Top of the next higher floor <u>15.2</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only) <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters
d) Attached garage (top of slab) <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) <u>15.2</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG) <u>6.1</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG) <u>6.9</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support <u>6.3</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION			
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.			
<input type="checkbox"/> Check here if comments are provided on back of form.		Were latitude and longitude in Section A provided by a licensed land surveyor? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Check here if attachments.			
Certifier's Name <u>Michael J. Williams</u>	License Number <u>NJ Gs25800</u>		
Title <u>Land Surveyor</u>	Company Name <u>Michael J. Williams Land Surveying, LLC</u>		
Address <u>56 Main Avenue</u>	City <u>Ocean Grove</u>	State <u>NJ</u>	ZIP Code <u>07756</u>
Signature <u>Michael J. Williams</u>	Date <u>03/05/2014</u>	Telephone <u>(732) 988-6440</u>	

PLACE  
STAMP  
HERE

COPY

**ELEVATION CERTIFICATE, page 2**

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 113 Fairview Place			Policy Number:	
City Neptune	State NJ	ZIP Code 07753	Company NAIC Number:	

**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.

Comments: There is a detached 172 square foot garage with a floor elevation of 5.9 feet with (4) engineered vents rated to cover a total of 800 square feet. SmartVent Model No. 1540-510.

Signature: *[Handwritten Signature]* Date: 3/05/2014

**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.

E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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 or Owner's Authorized Representative's Name \_\_\_\_\_

Address	City	State	ZIP Code
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.

- G1.  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.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- 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: \_\_\_\_\_  feet  meters 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
Signature	Date

Comments \_\_\_\_\_

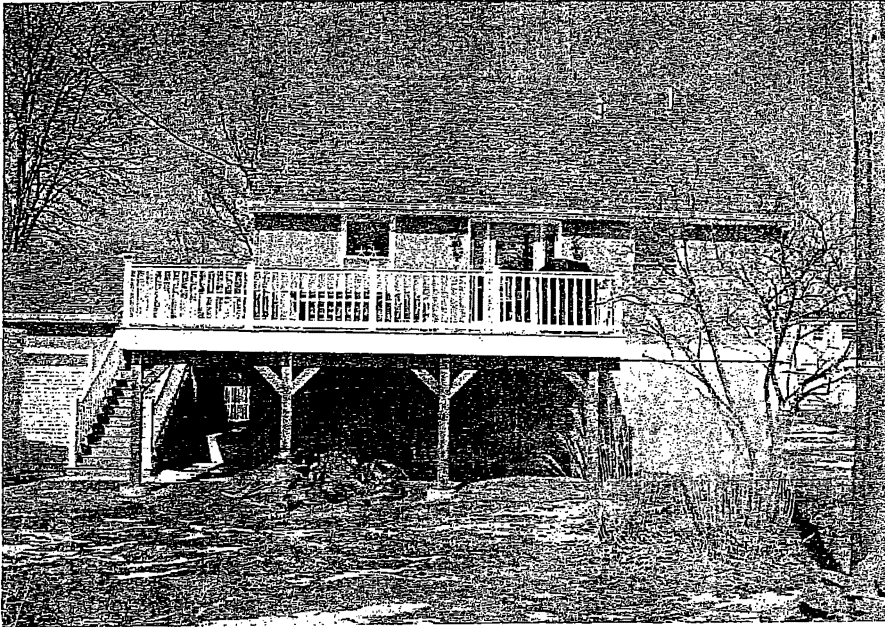
Check here if attachments.

**BUILDING PHOTOGRAPHS**

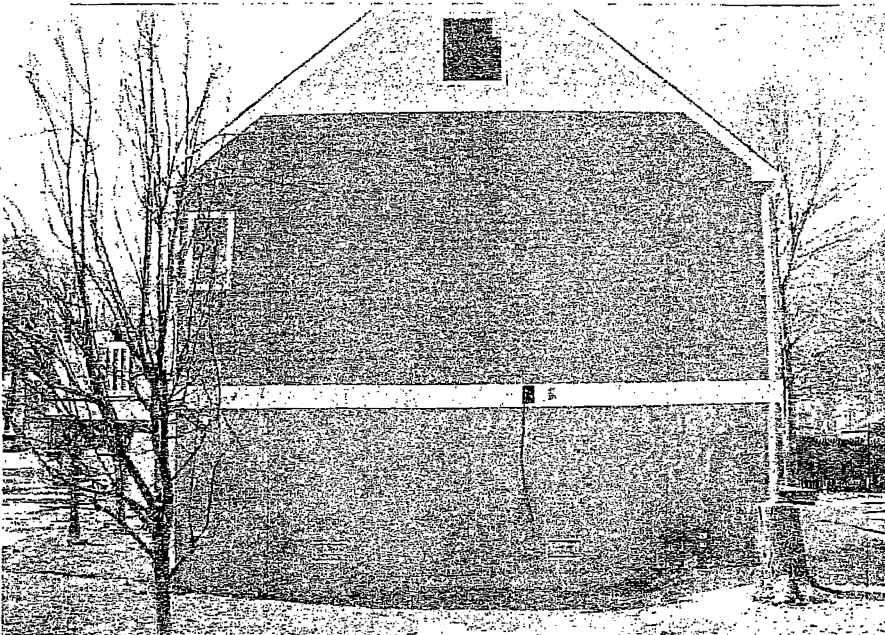
See Instructions for Item A6.

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 113 Fairview Place			Policy Number:	
City Neptune	State NJ	ZIP Code 07753	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.



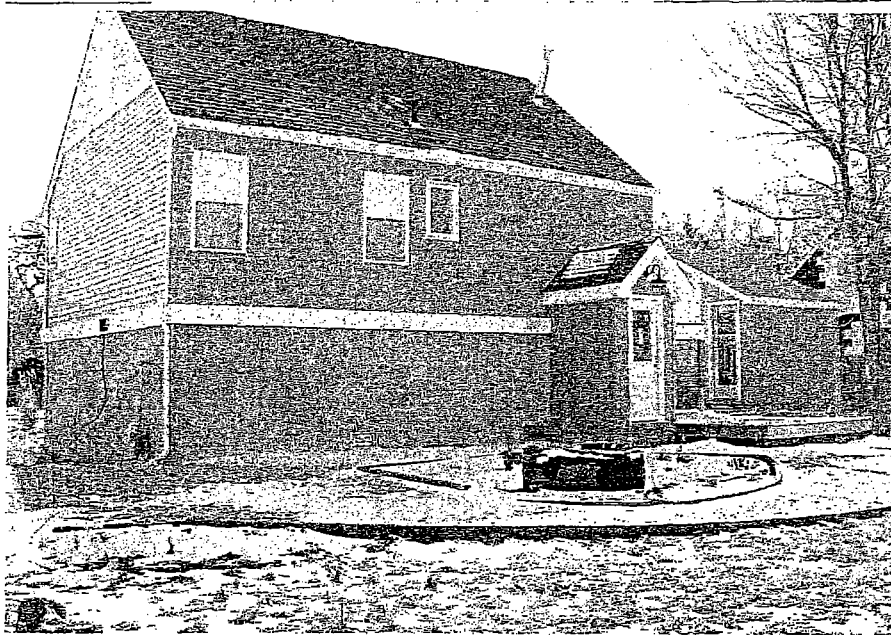
FRONT VIEW  
3/5/14



RIGHT SIDE VIEW  
3/5/14

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 113 Fairview Place			Policy Number:	
City Neptune	State NJ	ZIP Code 07753	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.



REAR VIEW  
3/5/14



LEFT SIDE VIEW  
3/5/14

**ICC-ES Evaluation Report****ESR-2074\***

Reissued December 1, 2012

This report is subject to renewal February 1, 2015.

[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:  
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 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 15<sup>3</sup>/<sub>4</sub> inches wide by 7<sup>3</sup>/<sub>4</sub> 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 8<sup>3</sup>/<sub>4</sub> 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 mm<sup>2</sup>) 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 mm<sup>2</sup>) 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

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



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<sup>®</sup> 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 m<sup>2</sup>) 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 m<sup>2</sup>) 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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).

# ELEVATION CERTIFICATE

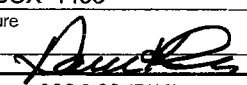
IMPORTANT: Follow the instructions on pages 1-9.

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

SECTION A - PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owner's Name <b>KELLY ARMADA</b>		Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <b>207 NORTH RIVERSIDE DRIVE</b>		Company NAIC Number:
City <b>NEPTUNE TOWNSHIP</b>	State <b>NJ</b>	ZIP Code <b>07753</b>
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) <b>TAX MAP LOT 1386 BLOCK 502.01</b>		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <b>RESIDENTIAL</b>		
A5. Latitude/Longitude: Lat. <b>N 40 11 59.28</b> Long. <b>W 74 02 39.50</b> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> 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 <b>5</b>		
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) <b>N/A</b> sq ft		a) Square footage of attached garage <b>N/A</b> sq ft
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade _____		b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____
c) Total net area of flood openings in A8.b _____ sq in		c) Total net area of flood openings in A9.b _____ sq in
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No		d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number <b>NEPTUNE TOWNSHIP 340317</b>			B2. County Name <b>MONMOUTH</b>		B3. State <b>NJ</b>
B4. Map/Panel Number <b>34025C0333</b>	B5. Suffix <b>G</b>	B6. FIRM Index Date <b>01/31/2014</b>	B7. FIRM Panel Effective/ Revised Date <b>01/31/2014</b>	B8. Flood Zone(s) <b>AE</b>	B9. Base Flood Elevation(s) (Zone A0, use base flood depth) <b>11</b>
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ / _____ / _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)	
C1. Building elevations are based on: <input type="checkbox"/> Construction Drawings* <input type="checkbox"/> Building Under Construction* <input checked="" type="checkbox"/> 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: <b>R.M. # 28, R.M. # 29 OLD FIRM</b> Vertical Datum: <b>NAVD 1988</b>	
Indicate elevation datum used for the elevations in items a) through h) below. <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> 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) <b>15 . 15</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
b) Top of the next higher floor <b>24 . 5 +/-</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only) <b>N/A</b>	<input type="checkbox"/> feet <input type="checkbox"/> meters
d) Attached garage (top of slab) <b>N/A</b>	<input type="checkbox"/> feet <input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) <b>15 . 15</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG) <b>5 . 0</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG) <b>5 . 6</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support <b>5 . 0</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION			
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.			
<input checked="" type="checkbox"/> Check here if comments are provided on back of form.		Were latitude and longitude in Section A provided by a licensed land surveyor? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input checked="" type="checkbox"/> Check here if attachments.			
Certifier's Name <b>PAUL K. LYNCH LS</b>		License Number <b>GS 35855</b>	
Title <b>LAND SURVEYOR</b>		Company Name <b>PAUL K. LYNCH LS</b>	
Address <b>P.O. BOX 1453</b>		City <b>WALL</b>	State <b>NJ</b>
Signature 		ZIP Code <b>07719</b>	Telephone <b>(732) 681-4035</b>
Date <b>06/06/2014</b>			

**ELEVATION CERTIFICATE, page 2**

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <b>207 NORTH RIVERSIDE DRIVE</b>			Policy Number:
City <b>NEPTUNE TOWNSHIP</b>	State <b>NJ</b>	ZIP Code <b>07753</b>	Company NAIC Number:

**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.

Comments **A8a AREA OF HOUSE FRAMING IS APPROX. 1100 s.f.**  
**C2e ELEVATION SHOWN IS BOTTOM OF FURNACE ON FIRST FLOOR**

Signature	Date <b>06/06/2014</b>
-----------	------------------------

**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 LOMRF 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.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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 or Owner's Authorized Representative's Name \_\_\_\_\_

Address _____	City _____	State _____	ZIP Code _____
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.

- G1.  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.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3.  The following information (Items G4–G9) 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: \_\_\_\_\_  feet  meters 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 _____
Signature _____	Date _____

Comments \_\_\_\_\_

Check here if attachments.

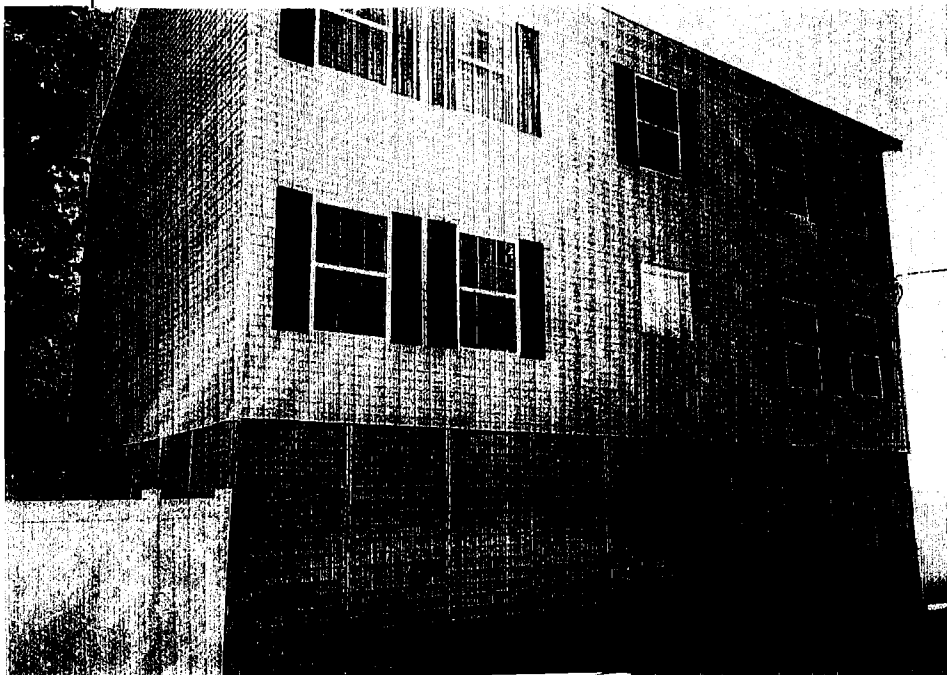


See Instructions for Item A6.

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <b>207 NORTH RIVERSIDE DRIVE</b>			Policy Number:	
City <b>NEPTUNE TOWNSHIP</b>	State <b>NJ</b>	ZIP Code <b>07753</b>	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.

6-06-14



LEFT  
FRONT



RIGHT  
FRONT



REAR

# ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

## SECTION A - PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

A1. Building Owner's Name James A. & Terrilyn Stowe

Policy Number:

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.  
 36 Waterview Court

Company NAIC Number:

City Neptune

State NJ

ZIP Code 07753

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)  
 Lot 8 Block 552

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential

A5. Latitude/Longitude: Lat. N 40° 11' 26.34" Long. W 74° 01' 39.78"

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) 732 sq ft
- b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 4
- c) Total net area of flood openings in A8.b 800 sq in
- d) Engineered flood openings?  Yes  No

A9. For a building with an attached garage:

- a) Square footage of attached garage 565 sq ft
- b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 3
- c) Total net area of flood openings in A9.b 600 sq in
- d) Engineered flood openings?  Yes  No

## SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number  
 Township of Neptune / 340317

B2. County Name  
 Monmouth County

B3. State  
 NJ

B4. Map/Panel Number  
 34025C0334

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)  
 9.0'

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:  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

## SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

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: Smart Net

Vertical Datum: NAVD 88

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.

Check the measurement used.

- a) Top of bottom floor (including basement, crawlspace, or enclosure floor) CS7.2  feet  meters
- b) Top of the next higher floor FF13.8  feet  meters
- c) Bottom of the lowest horizontal structural member (V Zones only) N.A  feet  meters
- d) Attached garage (top of slab) GF6.7  feet  meters
- e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) 13.6  feet  meters
- f) Lowest adjacent (finished) grade next to building (LAG) 5.9  feet  meters
- g) Highest adjacent (finished) grade next to building (HAG) 6.6  feet  meters
- h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support 5.9  feet  meters

## SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

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.

- Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No
- Check here if attachments.

Certifier's Name Robert Vallee PLS

License Number 43276

Title Land Surveyor

Company Name Vallee Surveying, LLC

Address 1810 Commons Way

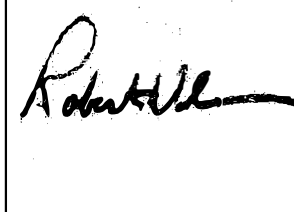
City Tom's River

State NJ ZIP Code 08755

Signature 

Date 08/12/15

Telephone 732-244-2373



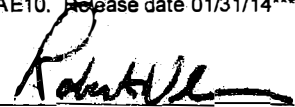
ELEVATION CERTIFICATE, page 2

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 36 Waterview Court			Policy Number	
City Neptune	State NJ	ZIP Code 07753	Company NAIC Number	

**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.

Comments The A/C is located at elev.=13.6'. Smart vent model number 1540-510 (200sq. in) \*\*\*Preliminary Updated FEMA Flood Hazard Data BFE=AE10. Release date 01/31/14\*\*\* This information is to be used for insurance purposes only.

  
 Signature \_\_\_\_\_ Date 8/12/15

**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.

E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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 \_\_\_\_\_

Address _____	City _____	State _____	ZIP Code _____
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.

G1.  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.)

G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

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: \_\_\_\_\_  feet  meters 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 _____
Signature _____	Date _____

Comments \_\_\_\_\_

Check here if attachments.

# Building Photographs

See Instructions for Item A6.

**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.  
36 Waterview Court

Policy Number:

City Neptune

State NJ

ZIP Code 07753

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.

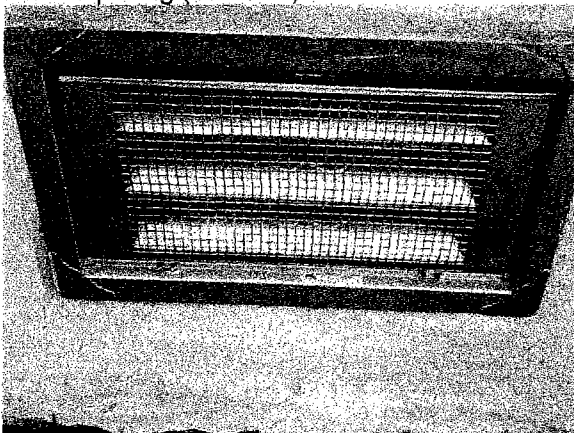
Front View (08/05/15)

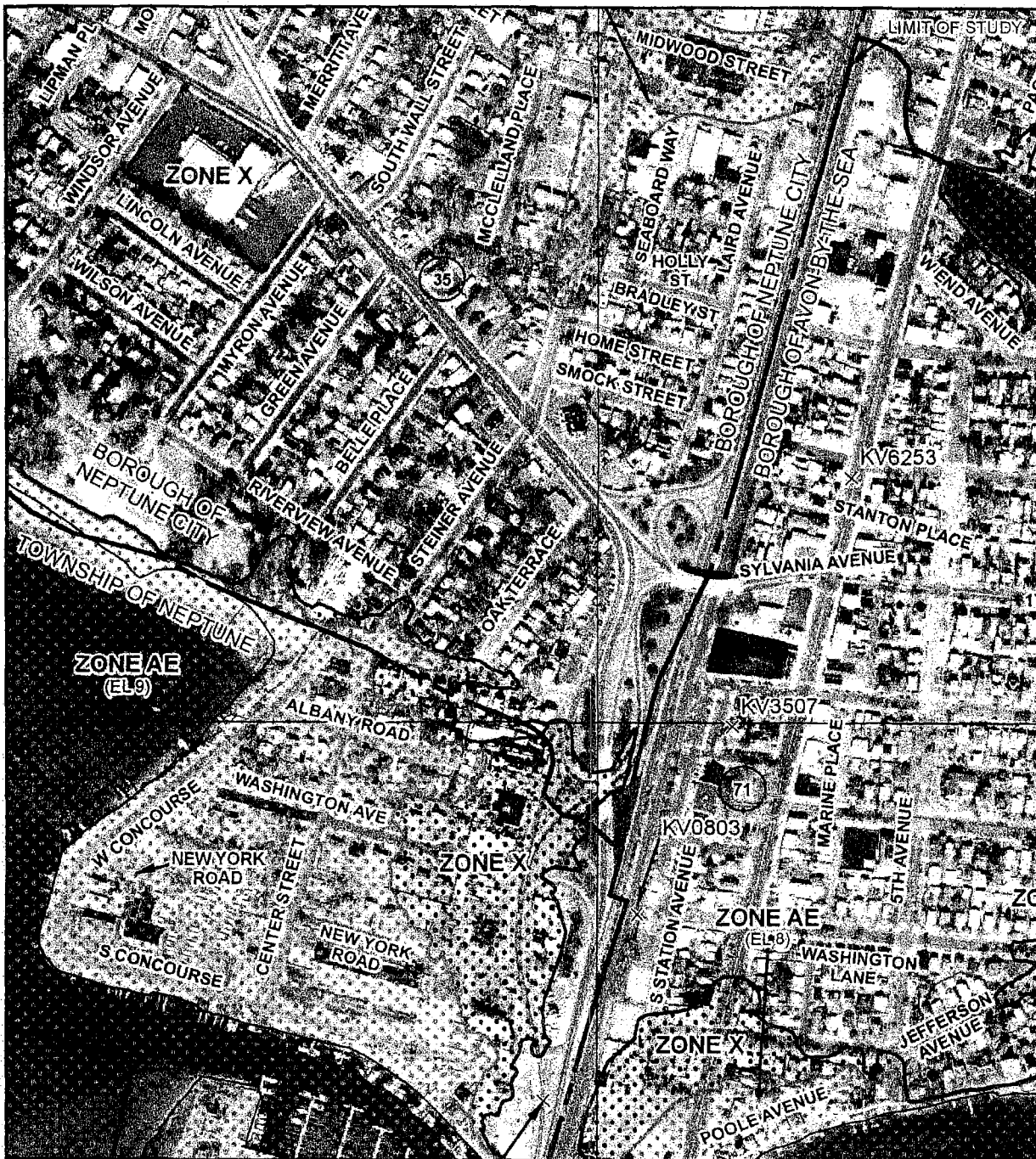


Rear View (08/05/15)



Flood Opening (08/05/15)





MAP SCALE 1" = 500'



PANEL 0334F

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**MONMOUTH COUNTY,**  
**NEW JERSEY**  
 (ALL JURISDICTIONS)

**PANEL 334 OF 457**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

COMMUNITY	NUMBER	PANEL	SUFFIX
ASBURY PARK, CITY OF	340285	0334	F
AVONBY-THE-SEA, BOROUGH OF	340287	0334	F
BELMAR, BOROUGH OF	345283	0334	F
BRADLEY BEACH, BOROUGH OF	340286	0334	F
NEPTUNE CITY, BOROUGH OF	340316	0334	F
NEPTUNE, TOWNSHIP OF	340317	0334	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

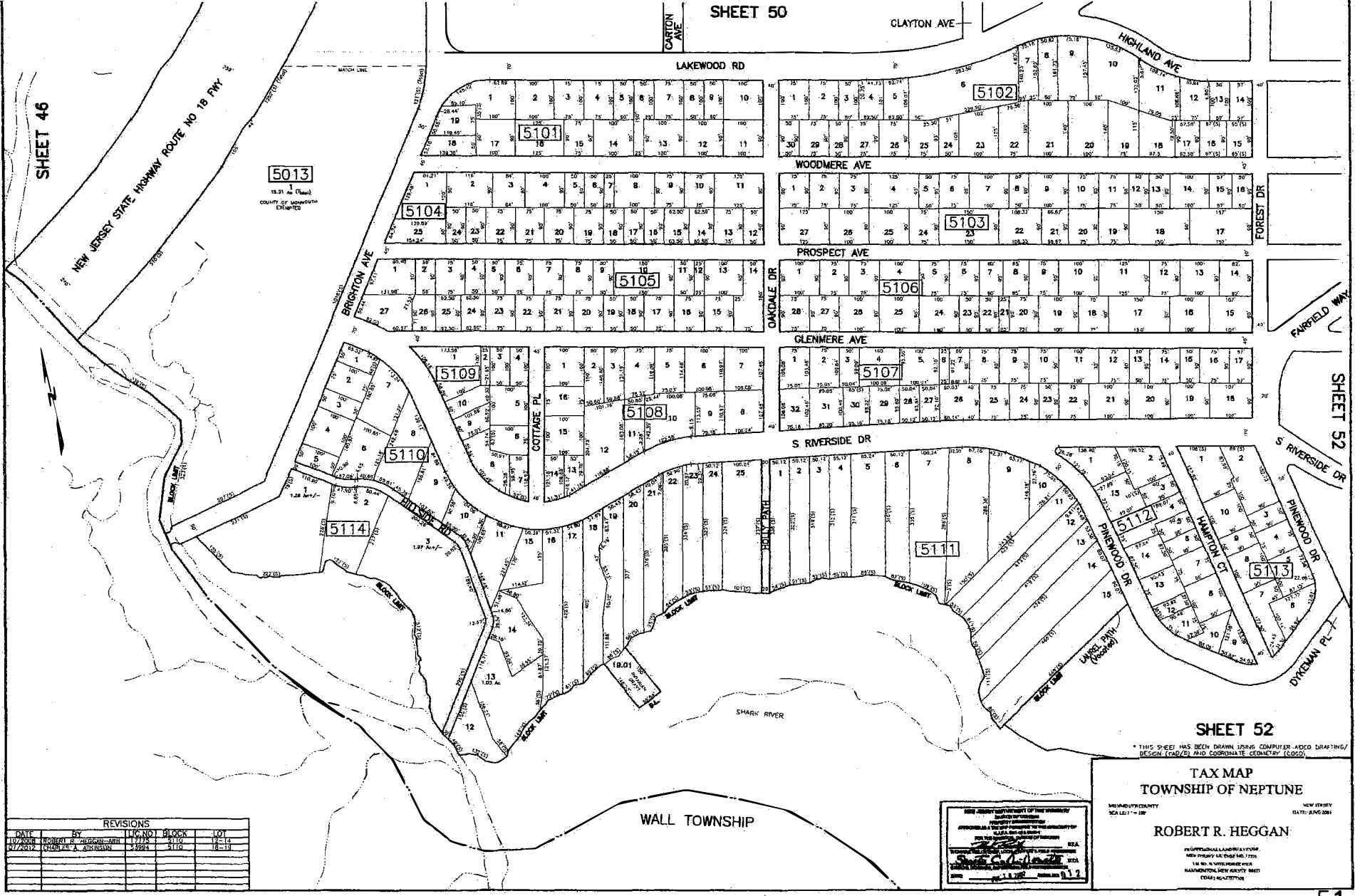


**MAP NUMBER**  
**34025C0334F**

**EFFECTIVE DATE**  
**SEPTEMBER 25, 2009**

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



SHEET 50

SHEET 46

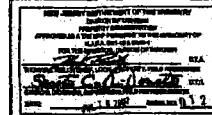
SHEET 52

SHEET 52

\* THIS SHEET HAS BEEN DRAWN USING COMPUTER AIDED DRAFTING / DESIGN (CAD/D) AND COORDINATE GEOMETRY (CGO)

TAX MAP  
TOWNSHIP OF NEPTUNE

ROBERT R. HEGGAN



NEW JERSEY DEPARTMENT OF TREASURY  
BUREAU OF TAXATION  
TAX MAPS SECTION  
100 MOUNTAIN PLAZA  
NEWARK, NEW JERSEY 07102  
TELEPHONE: (973) 486-2000  
FAX: (973) 486-2001

REVISIONS				
DATE	BY	DESCRIPTION	BLOCK	LOT
11/20/98	ROBERT R. HEGGAN	1775	510	12-14
07/20/97	THOMAS A. ADAMS	1524	510	18-19



Enter an address to view effective and updated flood risk information for that location:

36 Waterview Court, Neptune NJ

Approximate Address Identified: 36 Waterview Ct, Neptune, New Jersey, 07753



**Updated FEMA Flood Hazard Data**

FEMA flood hazard data currently available for coastal areas of New York and New Jersey is provided below to help you understand the current flood risk to your property and to guide Sandy recovery and rebuilding efforts.

Note: This tool provides flood zone and Base Flood Elevation (BFE) information for areas affected by coastal flood risk. However, riverine flood zone information will also be returned by the tool in communities where preliminary FIRMs have been released.

Attribute Name	Attribute Value
What is the most recent FEMA flood hazard data source available for this location?	<a href="#">Preliminary Flood Insurance Rate Map (FIRM)</a>
What is my property's Base Flood Elevation (BFE)? (For AO Zones, the flood depth will be shown instead of an elevation; For N/A results, please contact your local floodplain administrator for more information.)	10 ft (NAVD88)
What is my property's Flood Zone? (For N/A results, please contact your local floodplain administrator for more information.)	AE
What is the estimated ground elevation at this location? (See licensed surveyor for actual elevation of your building)	N/A
What does my FEMA Flood Hazard Map Panel look like?	<a href="#">Link to Preliminary FIRM.PDF</a>
View your property on our Interactive Web Tool	<a href="#">Link to Web Tool (Note: You will need to enter your address again to zoom to your location in the Web Tool.)</a>
Where can I get the GIS data for my property area?	<a href="#">Link to Preliminary FIRM GIS files</a>

**Effective Flood Insurance Data**

This information is from the effective Flood Insurance Rate Map for your community. It is used to determine who must buy flood insurance and how much it costs. It may also be used by your community to regulate development in flood prone areas.

Attribute Name	Attribute Value
What is my property's current effective Base Flood Elevation?	9 ft (NAVD88)
What is my property's current effective Flood Zone?	AE



Most Widely Accepted and Trusted

# ICC-ES Report

## ESR-2074

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

Reissued 02/2015  
This report is subject to renewal 02/2017.

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



Look for the trusted marks of Conformity!

*"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"*



A Subsidiary of

*ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.*





**ICC-ES Evaluation Report****ESR-2074\***

Reissued February 2015

This report is subject to renewal February 2017.

[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 EVALUATION SCOPE****Compliance with the following codes:**

- 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

**Properties evaluated:**

- Physical operation
- Water flow

**2.0 USES**

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

**3.0 DESCRIPTION****3.1 General:**

When subjected to rising water, the Smart Vent® FVs internal floats are activated, 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 FV 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 door to rotate out of the way and allow flow.

The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. 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 FVs 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 FVs must be installed in accordance with Section 4.0.

**3.3 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 mm<sup>2</sup>) 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 mm<sup>2</sup>) of net free area to supply natural ventilation. Other FVs recognized in this report do not offer natural ventilation.

**4.0 DESIGN AND 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 masonry and 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® FVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square feet (18.6 m<sup>2</sup>) 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 FV for every 400 square feet (37.2 m<sup>2</sup>) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final

\*Revised July 2015

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



grade or floor and finished exterior grade immediately under each opening.

## 5.0 CONDITIONS OF USE

The Smart Vent® FVs 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® FVs 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® FVs 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 Mechanically Operated Flood Vents (AC308), dated October 2013 (editorially revised May 2014).

## 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).

TABLE 1—MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT®	1540-510	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
FloodVENT® Overhead Door	1540-524	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Overhead Door	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent® Stacker	1540-521	16" X 16"	400

For SI: 1 Inch = 25.4 mm; 1 square foot = m<sup>2</sup>

# ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

## SECTION A - PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

A1. Building Owner's Name Michael Pullano

Policy Number

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.  
 28 Albany Road

Company NAIC Number

City Neptune

State NJ

ZIP Code 07753

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)  
 Tax Lot 3 Block 557, Neptune Township, Monmouth County, NJ

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential

A5. Latitude/Longitude: Lat. 40-11'-29.4" Long. 74-01'-36.0"

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) 1090 sq ft
- b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 6
- c) Total net area of flood openings in A8.b 1200 sq in
- d) Engineered 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 in A9.b N/A sq in
- d) Engineered flood openings?  Yes  No

## SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number  
 Neptune Township - 340317

B2. County Name  
 Monmouth.

B3. State  
 NJ

B4. Map/Panel Number  
 34025C0334

B5. Suffix  
 F

B6. FIRM Index Date  
 9/25/09

B7. FIRM Panel Effective/Revised Date  
 9/25/09

B8. Flood Zone(s)  
 AE

B9. Base Flood Elevation(s) (Zone AO, use base flood depth)  
 9

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:  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

## SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

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: GPS-Smartnet

Vertical Datum: NAVD88

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.

Check the measurement used.

- a) Top of bottom floor (including basement, crawlspace, or enclosure floor) 8.3  feet  meters
- b) Top of the next higher floor 15.6  feet  meters
- c) Bottom of the lowest horizontal structural member (V Zones only) N/A  feet  meters
- d) Attached garage (top of slab) N/A  feet  meters
- e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) 12.8  feet  meters
- f) Lowest adjacent (finished) grade next to building (LAG) 8.2  feet  meters
- g) Highest adjacent (finished) grade next to building (HAG) 8.6  feet  meters
- h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support 8.3  feet  meters

## SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

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.

- Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No
- Check here if attachments.

Certifier's Name John P. Augustine

License Number 34838

Title Land Surveyor

Company Name Gravatt Consulting Group, Inc.-9766

Address 414 Lacey Road

City Forked River

State NJ

ZIP Code 08731

Signature *John P. Augustine*

Date 9/21/15

Telephone 609-693-6126 ext.100

**ELEVATION CERTIFICATE, page 2**

<b>IMPORTANT:</b> In these spaces, copy the corresponding information from Section A.	<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 28 Albany Road	Policy Number:
City Neptune State NJ ZIP Code 07753	Company NAIC Number:

**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.

Comments This certificate certified to the owners in line A1 only and is non-transferrable. Property is located in preliminary flood zone AE, elev.=10, per preliminary map 34025C0334G, published 1/31/14 by FEMA, this is for informational purposes only & subject to verification by FEMA. Flood vents are Smart Vent Model No. 1540-510 (Typ.) Utilities: A/C Deck el.=13.6; Furnace el.=13.1; W.Heater el.=12.8, Elec.Mtr.el.=13.9.

Signature *John P. Argente* Date 9/2/15

**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.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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 \_\_\_\_\_

Address _____	City _____	State _____	ZIP Code _____
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.

- G1.  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.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- 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: \_\_\_\_\_  feet  meters 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 _____
Signature _____	Date _____

Comments \_\_\_\_\_

Check here if attachments.

# Building Photographs

See Instructions for Item A6.

**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.

Policy Number:

28 Albany Road

City Neptune

State NJ

ZIP Code 07753

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.



FRONT VIEW



REAR VIEW



# Building Photographs

Continuation Page

**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.  
28 Albany Road

Policy Number:

City Neptune

State NJ

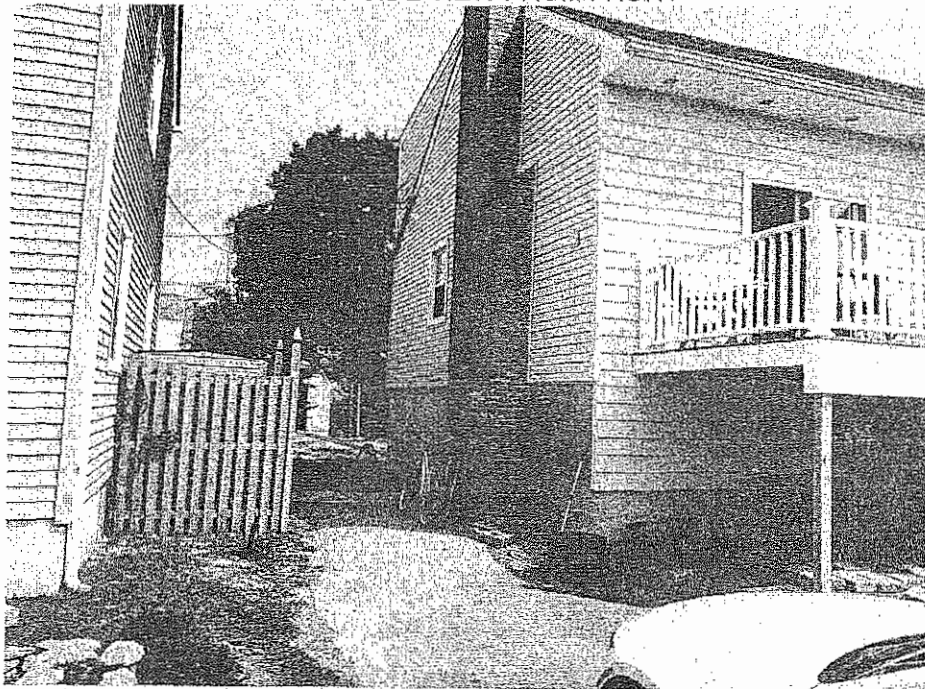
ZIP Code 07753

Company NAIC Number:

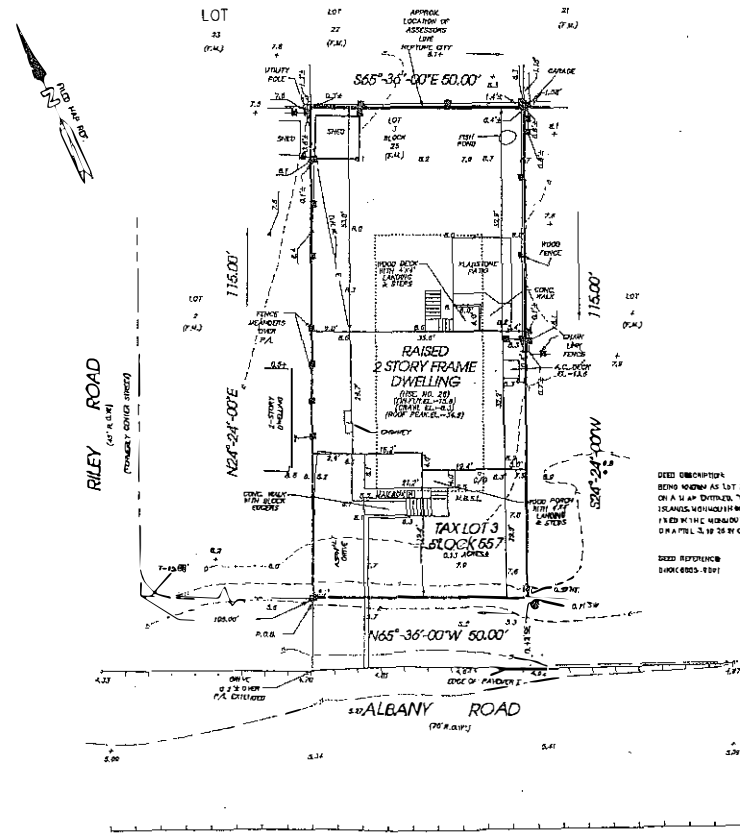
If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.



RIGHT SIDE VIEW FROM FRONT



LEFT SIDE VIEW FROM FRONT



DEED DESCRIPTION  
 BEING NOW IN AS LOT 3 IN BLOCK 557, AS SHOWN  
 ON A MAP ENTITLED "MAP OF SHARON HICKS  
 ISLANDS, MONMOUTH COUNTY, NEW JERSEY"  
 FILED IN THE MONMOUTH COUNTY CLERK'S OFFICE  
 ON APRIL 2, 19 25 IN CASE NO. 21, 942 (T.)

DEED REFERENCE  
 BLOCK 557-1001

**NOTES:**

- EXISTING PROPERTY INFORMATION SHOWN HEREON WAS DERIVED FROM A CERTAIN PLAN ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY SUTLAKE TOWNSHIP OF NEPTUNE, MONMOUTH COUNTY, NEW JERSEY, BLOCK 557 LOT 3," PREPARED BY SENECA SURVEY CO., INC. DATED MAY 26, 2015. THE SURVEY WAS PREPARED FROM ORIGINAL PULLMAN AND IS BEING UTILIZED AS PART OF THIS MAP PER HIS REQUEST.
- EXCEPT AS SPECIFICALLY STATED OR SHOWN ON THIS PLAT, THIS SURVEY DOES NOT PURPORT TO REFLECT ANY OF THE FOLLOWING WHICH MAY BE APPLICABLE TO THE SUBJECT REAL ESTATE: EASEMENTS, OTHER THAN POSSIBLE EASEMENTS WHICH WERE VISIBLE AT THE TIME OF MAKING OF THIS SURVEY; BUILDING SETBACK LINES; RESTRICTIVE COVENANTS; SUBDIVISION RESTRICTIONS; ZONING OR OTHER LAND-USE REGULATIONS; AND ANY OTHER FACTS WHICH AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
- NO INVESTIGATION WAS MADE CONCERNING SUBSURFACE CONDITIONS OR THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES WHICH MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.
- THERE ARE NO FRESHWATER WETLANDS ON THE SITE.
- OFFSETS AS SHOWN HEREON ARE NOT TO BE USED FOR CONSTRUCTION OF FENCES OR ANY OTHER PERMANENT STRUCTURE AND/OR THE PLACEMENT OF ACCESSORY BUILDINGS.
- ALL ELEVATIONS ARE BASED ON NAVD OF 1988.
- UNDERGROUND UTILITIES NOT LOCATED BY THIS SURVEY. ANY/ALL CONTRACTORS SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION WORK ON THIS SITE. THE TELEPHONE NUMBER TO MARK OUT UTILITIES IN FIELD IS "NEW JERSEY ONE CALL" 1-800-272-1000.
- PROPERTY IS LOCATED IN FLOOD ZONE AE. BASE FLOOD ELEVATION = 9 (NAVD 1988) AS SHOWN ON FLOOD INSURANCE RATE MAP NEPTUNE TOWNSHIP, COMMUNITY NO. 34017, PANEL 0344, MAP NO. J4025G0344, EFFECTIVE DATE 8/25/2008. THE PROPERTY'S PRELIMINARY BASE FLOOD ELEVATION IS ELEVATION 10 (NAVD 1988) AND IS LOCATED IN PRELIMINARY FLOOD ZONE AE AS SHOWN PRELIMINARY MAP NO. J4025G0344, PUBLISHED 1/31/2014. THIS IS FOR INFORMATIONAL PURPOSES ONLY AND IS SUBJECT TO VERIFICATION BY FEMA.

**LEGEND**

- - - - - ELEVATION CONTOUR
- 5.5 = 5'00" ELEVATION
- - - - - OVERHEAD UTILITY WIRE
- ⊠ = WATER VALVE
- ⊞ = WATER METER
- ⊙ = SAN. CLEAN OUT
- M.B.S.L. = MINIMUM BUILDING SETBACK LINE

LEGEND  
 ● - HIGH FLOOD  
 ○ - PVE FLOOD

**ZONE: R-2**

MINIMUMS:	REQUIRED:	PROVIDED:
LOT AREA	10,000 S.F.	5730 S.F.
LOT WIDTH	100 FT.	50 FT.
LOT FRONTAGE	100 FT.	50 FT.
LOT DEPTH	100 FT.	113 FT.
<b>PRINCIPAL BUILDING:</b>		
FRONT SETBACK (BLDG. LINE)	25 FT.	29.5 FT.
REAR SETBACK	30 FT.	52.9 FT.
SIDE SETBACK	10 FT. (25' COMBINED)	50 FT. (14.0' TOTAL)
<b>MAXIMUMS:</b>		
BUILDING HEIGHT	35 FT. (25 Sty.)	26.0 FT. (RIDGE PEAK TO GRADE)
BLDG. COVERAGE	30%	20.7%
LOT COVERAGE	40%	32.6%

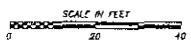
EXISTING NON CONFORMITY

TO: MICHAEL PULLMAN:

I do hereby certify that this survey is accurate and that this drawing is a true representation of actual conditions existing on the property, except such ascertainment, if any, that may be located below the surface of the lands, or on the surface of the lands and not visible. This certification is made only to persons named parties to purchase and/or mortgage of herein delineated property. The responsibility or liability is assumed by Surveyor for any error or any other surveying inaccuracy, but not limited to error of survey for survey of lands, tracts of property or to any other person not listed in certification, either directly or indirectly.

No.	DATE	REVISION	BY	CHK.
1	4/13/15		JOHN P. AUGUSTINE	

JOHN P. AUGUSTINE  
 N.J. Professional Land Surveyor No. 34938



FINAL ASSUILT MAP OF  
**TAX LOT 3 BLOCK 557**  
 28 ALBANY ROAD  
 NEPTUNE TOWNSHIP  
 MONMOUTH COUNTY, NEW JERSEY

**GRAVATT CONSULTING GROUP**  
 Registered - Surveyors - Planners - Environmental Scientists  
 414 Leaky Road, Forked River, NJ 08731  
 Tel: 856-982-0127 info@gravattconsulting.com  
 gravattconsulting.com

SCALE: 1" = 20'
DATE: 3/1/15
DRAWN BY: MJD
CHECKED BY:
SHEET NO. 1 OF 1
PROJECT NUMBER <b>9766</b>



Most Widely Accepted and Trusted

# ICC-ES Report

## ESR-2074

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

Reissued 02/2015  
This report is subject to renewal 02/2017.

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



Look for the trusted marks of Conformity!

*"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"*



A Subsidiary of

*ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.*





**ICC-ES Evaluation Report****ESR-2074\***

Reissued February 2015

This report is subject to renewal February 2017.

[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 EVALUATION SCOPE****Compliance with the following codes:**

- 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

**Properties evaluated:**

- Physical operation
- Water flow

**2.0 USES**

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

**3.0 DESCRIPTION****3.1 General:**

When subjected to rising water, the Smart Vent® FVs internal floats are activated, 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 FV 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 door to rotate out of the way and allow flow.

The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. 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 FVs 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 FVs must be installed in accordance with Section 4.0.

**3.3 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 mm<sup>2</sup>) 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 mm<sup>2</sup>) of net free area to supply natural ventilation. Other FVs recognized in this report do not offer natural ventilation.

**4.0 DESIGN AND 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 masonry and 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® FVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square feet (18.6 m<sup>2</sup>) 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 FV for every 400 square feet (37.2 m<sup>2</sup>) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final

\*Revised July 2015

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



grade or floor and finished exterior grade immediately under each opening.

### 5.0 CONDITIONS OF USE

The Smart Vent® FVs 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® FVs 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® FVs 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 Mechanically Operated Flood Vents (AC308), dated October 2013 (editorially revised May 2014).

### 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).

TABLE 1—MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT®	1540-510	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
FloodVENT® Overhead Door	1540-524	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Overhead Door	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent® Stacker	1540-521	16" X 16"	400

For SI: 1 Inch = 25.4 mm; 1 square foot = m<sup>2</sup>

# ELEVATION CERTIFICATE

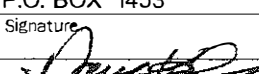
**IMPORTANT:** Follow the instructions on pages 1-9.

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

SECTION A - PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owner's Name <b>LORRAINE M. ROSS</b>		Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or R.O. Route and Box No. <b>118 BEVERLY WAY</b>		Company NAIC Number:
City <b>NEPTUNE TOWNSHIP</b>	State <b>NJ</b>	ZIP Code <b>07753</b>
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) <b>TAX MAP LOT 1 BLOCK 5306</b>		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <b>RESIDENTIAL</b>		
A5. Latitude/Longitude: Lat. <b>N 40 11 39.30</b> Long. <b>W 74 02 29.20</b> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> 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 <b>7</b>		
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) <b>1115</b> sq ft		a) Square footage of attached garage <b>500</b> sq ft
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <b>7</b>		b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <b>3</b>
c) Total net area of flood openings in A8.b <b>comment</b> sq in		c) Total net area of flood openings in A9.b <b>comment</b> sq in
d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number <b>NEPTUNE TOWNSHIP 340317</b>		B2. County Name <b>MONMOUTH</b>		B3. State <b>NJ</b>	
B4. Map/Panel Number <b>34025C0333</b>	B5. Suffix <b>F</b>	B6. FIRM Index Date <b>09/25/2009</b>	B7. FIRM Panel Effective/Revised Date <b>09/25/2009</b>	B8. Flood Zone(s) <b>AE</b>	B9. Base Flood Elevation(s) (Zone A0, use base flood depth) <b>9</b>
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ / _____ / _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)	
C1. Building elevations are based on: <input type="checkbox"/> Construction Drawings* <input type="checkbox"/> Building Under Construction* <input checked="" type="checkbox"/> Finished Construction *A new Elevation Certificate will be required when construction of the building is complete.	
C2. Elevations - Zones A 1-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: <b>R.M. # 28, R.M. # 29 OLD FIRM</b> Vertical Datum: <b>NAVD 1988</b> Indicate elevation datum used for the elevations in items a) through h) below. <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> 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) <b>6 . 37</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
b) Top of the next higher floor <b>15 . 47</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only) <b>N/A</b>	<input type="checkbox"/> feet <input type="checkbox"/> meters
d) Attached garage (top of slab) <b>5 . 95</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) <b>12 . 77</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG) <b>5 . 6</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG) <b>6 . 1</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support <b>5 . 6</b>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION			
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.			
<input checked="" type="checkbox"/> Check here if comments are provided on back of form.		Were latitude and longitude in Section A provided by a licensed land surveyor? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input checked="" type="checkbox"/> Check here if attachments.			
Certifier's Name <b>PAUL K. LYNCH LS</b>		License Number <b>GS35855</b>	
Title <b>LAND SURVEYOR</b>		Company Name <b>PAUL K. LYNCH LS</b>	
Address <b>P.O. BOX 1453</b>		City <b>WALL</b>	State <b>NJ</b>
Signature 		Date <b>04/14/2016</b>	ZIP Code <b>07719</b>
		Telephone <b>(732) 681-4035</b>	

**ELEVATION CERTIFICATE, page 2**

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <b>118 BEVERLY WAY</b>			Policy Number:	
City <b>NEPTUNE TOWNSHIP</b>	State <b>NJ</b>	ZIP Code <b>07753</b>	Company NAIC Number:	

**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.

Comments **A8b,c,A9b,c ALL OPENINGS HAVE "SMART" VENT MODEL 1540-510 INSTALLED,MANUFACT. CERTIFIES EACH COVERS 200SF(ENCLOS. COVERAGE 1400SF/GARAGE COVERAGE 600SF) C2e ELEVATION SHOWN IS BOTTOM OF A.C. UNIT ATTACHED TO SIDE OF GARAGE PRELIMINARY FIRM 34025C0333G DATED 1-30-2015 SHOWS STRUCTURE IN ZONE AE BFE = 10**

Signature  Date **04/14/2016**

**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 E 1-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.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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 or Owner's Authorized Representative's Name \_\_\_\_\_

Address _____	City _____	State _____	ZIP Code _____
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.

- G1.  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.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3.  The following information (Items G4-G9) 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: \_\_\_\_\_  feet  meters 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 _____
Signature _____	Date _____

Comments \_\_\_\_\_

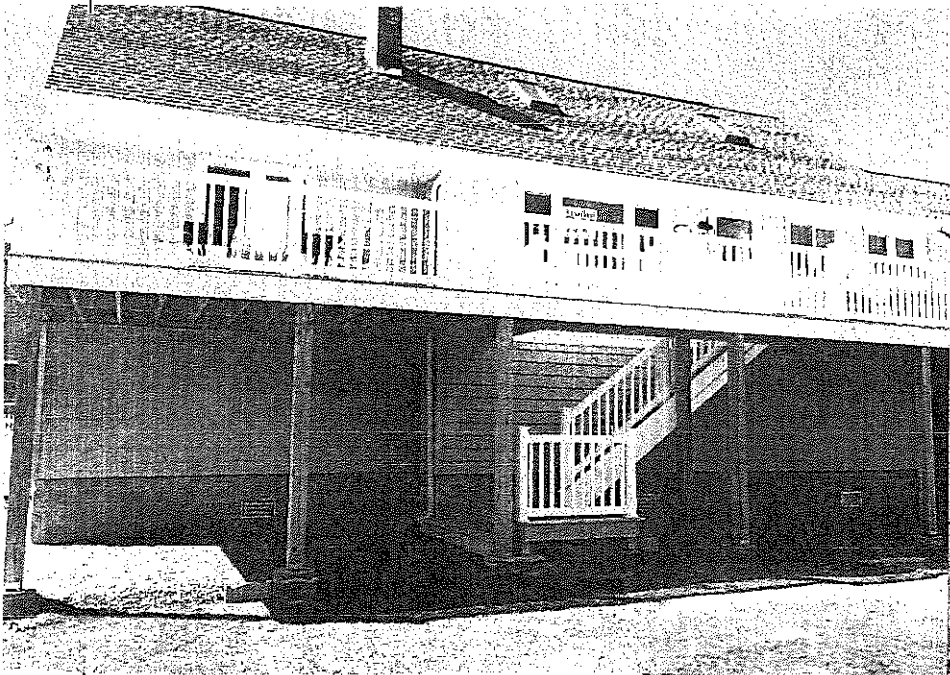
Check here if attachments.

See Instructions for Item A6.

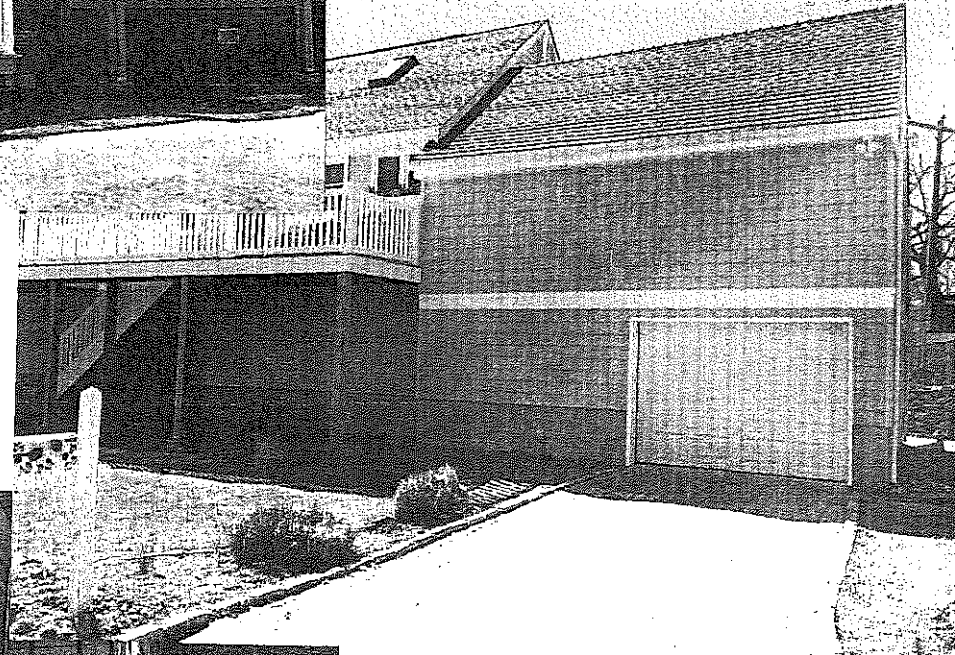
<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 118 BEVERLY WAY			Policy Number:	
City NEPTUNE TOWNSHIP	State NJ	ZIP Code 07753	Company 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.

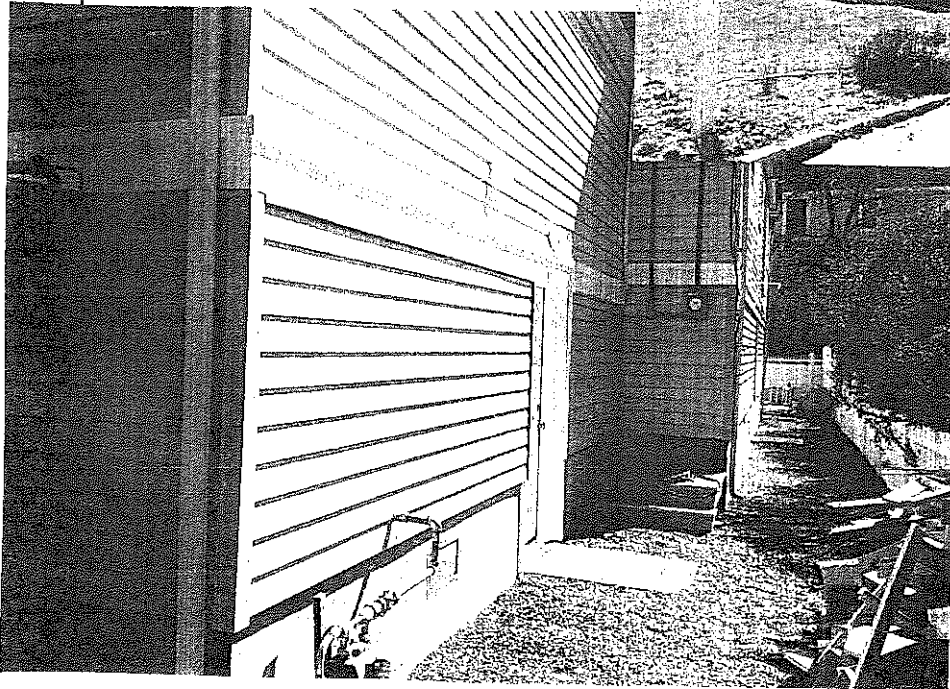
4-13-16



LEFT FRONT



RIGHT FRONT



LEFT REAR



Most Widely Accepted and Trusted

# ICC-ES Report

## ESR-2074

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

Reissued 02/2015  
This report is subject to renewal 02/2017.

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



Look for the trusted marks of Conformity!

*"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"*



A Subsidiary of

*ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.*



**ICC-ES Evaluation Report****ESR-2074\***

Reissued February 2015

This report is subject to renewal February 2017.

[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 EVALUATION SCOPE****Compliance with the following codes:**

- 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

**Properties evaluated:**

- Physical operation
- Water flow

**2.0 USES**

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

**3.0 DESCRIPTION****3.1 General:**

When subjected to rising water, the Smart Vent® FVs internal floats are activated, 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 FV 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 door to rotate out of the way and allow flow.

The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. 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 FVs 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 FVs must be installed in accordance with Section 4.0.

**3.3 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 mm<sup>2</sup>) 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 mm<sup>2</sup>) of net free area to supply natural ventilation. Other FVs recognized in this report do not offer natural ventilation.

**4.0 DESIGN AND 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 masonry and 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® FVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square feet (18.6 m<sup>2</sup>) 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 FV for every 400 square feet (37.2 m<sup>2</sup>) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final

\*Revised July 2015

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



grade or floor and finished exterior grade immediately under each opening.

#### 5.0 CONDITIONS OF USE

The Smart Vent® FVs 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® FVs 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® FVs 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 Mechanically Operated Flood Vents (AC308), dated October 2013 (editorially revised May 2014).

#### 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).

TABLE 1—MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT®	1540-510	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
FloodVENT® Overhead Door	1540-524	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Overhead Door	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent® Stacker	1540-521	16" X 16"	400

For SI: 1 Inch = 25.4 mm; 1 square foot = m<sup>2</sup>



# ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

## SECTION A - PROPERTY INFORMATION

## FOR INSURANCE COMPANY USE

A1. Building Owner's Name Lena D'Aloia & Louise Ventola	Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 102 Prospect Avenue City Township of Neptune State NJ ZIP Code 07753-5806	Company NAIC Number:

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)  
 Tax lot 4, Tax block 5413

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential

A5. Latitude/Longitude: Lat. 40°11'20.9" Long. -074°02'21.9" 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 5

A8. For a building with a crawlspace or enclosure(s):  
 a) Square footage of crawlspace or enclosure(s) None sq ft  
 b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade None  
 c) Total net area of flood openings in A8.b 0 sq in  
 d) Engineered 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 in A9.b N/A sq in  
 d) Engineered flood openings?  Yes  No

## SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number Township of Neptune 340317	B2. County Name Monmouth	B3. State NJ			
B4. Map/Panel Number 34025C/0333	B5. Suffix F	B6. FIRM Index Date September 25, 2009	B7. FIRM Panel Effective/Revised Date September 25, 2009	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 9.0 feet

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:  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

## SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

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: \_\_\_\_\_ Vertical Datum: NAVD'88  
 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.

Check the measurement used.

a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	<u>13.03</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters
b) Top of the next higher floor	<u>N/A</u>	<input type="checkbox"/> feet	<input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only)	<u>N/A</u>	<input type="checkbox"/> feet	<input type="checkbox"/> meters
d) Attached garage (top of slab)	<u>N/A</u>	<input type="checkbox"/> feet	<input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	<u>12.45</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG)	<u>6.60</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG)	<u>7.55</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	<u>6.47</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters

## SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

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.

Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No

Check here if attachments.

Certifier's Name	John W. McCord, Sr.	License Number	24GS03538500
Title	Land Surveyor	Company Name	Clearpoint Services, LLC.
Address	2105 W. County Line Road	City	Jackson
		State	NJ
		ZIP Code	08527
Signature	<i>John W. McCord, Sr.</i>	Date	08-11-2015
		Telephone	732-905-5463

8-13-2015

**ELEVATION CERTIFICATE, page 2**

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>	<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 102 Prospect Avenue	Policy Number:
City Township of Neptune State NJ ZIP Code 07753-5806	Company NAIC Number:

**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.

Comments There is no permanent enclosure at the ground level (it is an open flow), the building is on pilings. The lowest machinery servicing the building is the Air Conditioning Unit elevated on a platform at elevation =12.45

FEMA "PRELIMINARY FIRM MAP NUMBER 34025C0333G" DATED JANUARY 30, 2015 (NOT OFFICIALY ADOPTED AS AN EFFECTIVE FIRM ON THIS DATE) INDICATES ZONE AE, WITH A BASE FLOOD ELEVATION OF 10.0 FEET ABOVE NAVD'88.

Signature *Jane A. L. S.* Date 08-11-2015

**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.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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

Address City State ZIP Code

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.

- G1.  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.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- 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: \_\_\_\_\_  feet  meters 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

Signature Date

Comments

Check here if attachments.

# Building Photographs

See Instructions for Item A6.

**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.  
102 Prospect Avenue

Policy Number:

City Township of Neptune

State NJ

ZIP Code 07753-5806

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.

Front view of 102 Prospect Avenue 8/11/2015



Rear view of 102 Prospect Avenue 8/11/2015



# Building Photographs

Continuation Page

**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.  
102 Prospect Avenue

Policy Number:

City Township of Neptune

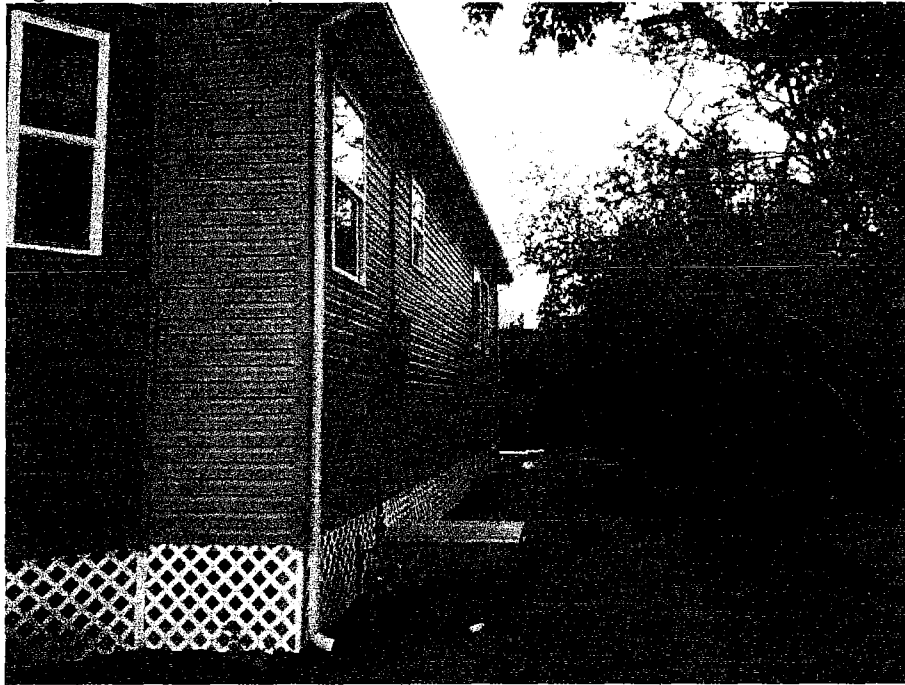
State NJ

ZIP Code 07753-5806

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.

Right side of 102 Prospect Avenue 8/11/2015



Left side of 102 Prospect Avenue 8/11/2015



# ELEVATION CERTIFICATE

**IMPORTANT:** Follow the instructions on pages 1-9.

OMB No. 1660-0008  
 Expiration Date: July 31, 2015

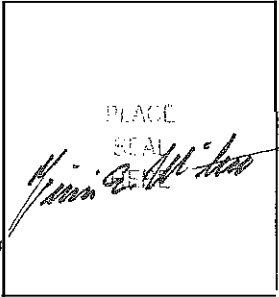
SECTION A - PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owner's Name <b>DOREMUS PROPERTY MANAGEMENT, LLC</b>	Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <b>107 FAIRVIEW PLACE</b>	Company NAIC Number:	
City <b>NEPTUNE TOWNSHIP</b> State <b>NEW JERSEY</b> ZIP Code <b>07753</b>		
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) <b>LOT 12, BLOCK 5306</b>		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <b>RESIDENTIAL</b>		
A5. Latitude/Longitude: Lat. <b>40.193612°</b> Long. <b>-74.040110°</b> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> 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 <b># 6</b>		
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) <b>1100</b> sqft		a) Square footage of attached garage <b>N/A</b> sqft
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <b>SIX</b>		b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <b>N/A</b>
c) Total net area of flood openings in A8.b <b>1200</b> sq in		c) Total net area of flood openings in A9.b <b>N/A</b> sq in
d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. FIRM Community Name & Community Number <b>NEPTUNE TOWNSHIP 340317</b>		B2. County Name <b>MONMOUTH</b>		B3. State <b>N.J.</b>	
B4. Map/Panel Number <b>34025C0333</b>	B5. Suffix <b>F</b>	B6. FIRM Index Date <b>09/25/2009</b>	B7. FIRM Panel Effective/Revised Date <b>09/25/2009</b>	B8. Flood Zone(s) <b>AE</b>	B9. Base Flood Elevation(s) (Zone A0, use base flood depth) <b>9 FEET</b>
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ / _____ / _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)	
C1. Building elevations are based on: <input type="checkbox"/> Construction Drawings* <input type="checkbox"/> Building Under Construction* <input checked="" type="checkbox"/> 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: <b>GPS SMARTNET</b> Vertical Datum: <b>NAVD'88</b> Indicate elevation datum used for the elevations in Items a) through h) below. <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____ Datum used for building elevations must be the same as that used for the BFE.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	<u>6.20</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
b) Top of the next higher floor	<u>16.60</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only)	<u>N/A</u> <input type="checkbox"/> feet <input type="checkbox"/> meters
d) Attached garage (top of slab)	<u>SAME AS a) ABOVE</u> <input type="checkbox"/> feet <input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	<u>13.00</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG)	<u>6.00</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG)	<u>6.20</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	<u>6.00</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION			
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.			
<input checked="" type="checkbox"/> Check here if comments are provided on back of form.		Were latitude and longitude in Section A provided by a licensed land surveyor? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Check here if attachments.			
Certifier's Name <b>WILLIAM E. McGRATH</b>		License Number <b>GS24194</b>	
Title <b>PRESIDENT</b>	Company Name <b>McGRATH SURVEYING &amp; WATERFRONT CONSULTING</b>		
Address <b>321 MANTOLOKING ROAD</b>	City <b>BRICK</b>	State <b>NJ</b>	ZIP Code <b>08723</b>
Signature <i>William E. McGrath</i>	Date <b>12/23/2015</b>	Telephone <b>848-232-3820</b>	

PLACE SEAL



**ELEVATION CERTIFICATE, page 2**

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>		<b>FOR INSURANCE COMPANY USE</b>	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 107 FAIRVIEW PLACE		Policy Number:	
City NEPTUNE TOWNSHIP	State N.J.	ZIP Code 07753	Company NAIC Number:

**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.

Comments: FEMA "PRELIMINARY FIRM MAP" (NOT OFFICIALLY ADOPTED AS A FIRM AS YET)  
 ZONE AE, BASE FLOOD ELEVATION 10 FEET ABOVE NAVD'88.  
 LOWEST EQUIPMENT SERVICING THE BUILDING IS AN ELEC. METER BOX ON OUTSIDE WALL.  
 HOUSE HAS SIX SMARTVENTS MODEL #1540-520, ICC CERTIFICATION ATTACHED.

Signature: *[Handwritten Signature]* Date: 12/22/2015

**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.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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 or Owner's Authorized Representative's Name \_\_\_\_\_

Address _____	City _____	State _____	ZIP Code _____
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.

- G1.  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.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3.  The following information (Items G4–G9) 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: \_\_\_\_\_  feet  meters 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 _____
Signature _____	Date _____

Comments \_\_\_\_\_

Check here if attachments.

**BUILDING PHOTOGRAPHS**

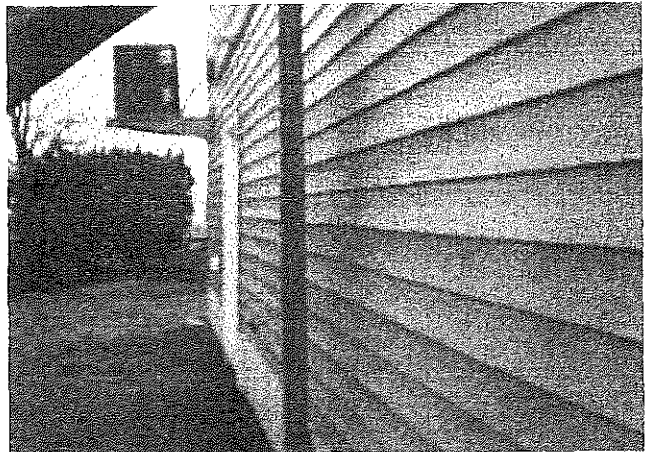
See Instructions for Item A6.

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 107 FAIRFIELD PLACE			Policy Number:	
City NEPTUNE TOWNSHIP	State N.J.	ZIP Code 07753	Company NAIC Number:	

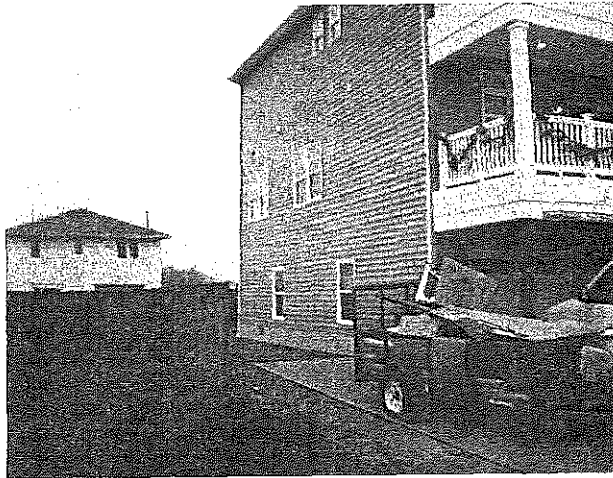
If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, 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.



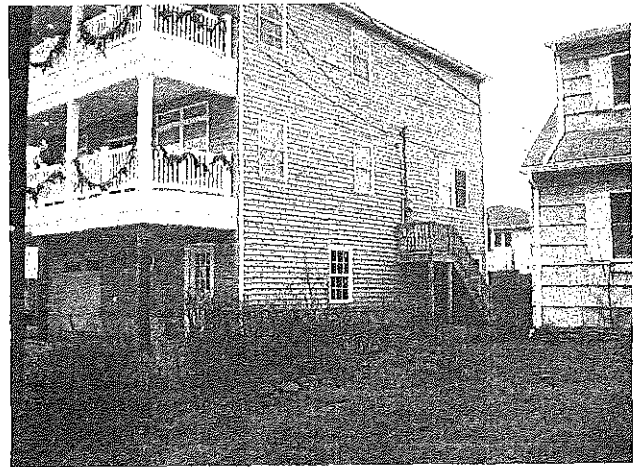
FRONT OF 107 FAIRVIEW PLACE



REAR OF 107 FAIRVIEW PLACE



WEST SIDE OF 107 FAIRVIEW PLACE



EAST SIDE OF 107 FAIRVIEW PLACE





Most Widely Accepted and Trusted

# ICC-ES Report

## ESR-2074

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

Reissued 02/2015  
This report is subject to renewal 02/2017

DIVISION: 08 00 00—OPENINGS  
SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

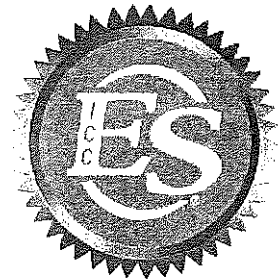
REPORT HOLDER:

**SMARTVENT PRODUCTS, INC.**

430 ANDBRO DRIVE, UNIT 1  
PITMAN, NEW JERSEY 08071

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-S20; #1540-521; #1540-510;  
#1540-511; #1540-570; #1540-574; #1540-524; #1540-514



Look for the trusted marks of Conformity!

*"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"*



ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report





**ICC-ES Evaluation Report****ESR-2074\***

Reissued February 2015

This report is subject to renewal February 2017.

[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 EVALUATION SCOPE****Compliance with the following codes:**

- 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)<sup>†</sup>

<sup>†</sup>The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

**Properties evaluated:**

- Physical operation
- Water flow

**2.0 USES**

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

**3.0 DESCRIPTION****3.1 General:**

When subjected to rising water, the Smart Vent® FVs internal floats are activated, 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 FV 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 door to rotate out of the way and allow flow.

The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. 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 FVs 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 FVs must be installed in accordance with Section 4.0.

**3.3 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 mm<sup>2</sup>) 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 mm<sup>2</sup>) of net free area to supply natural ventilation. Other FVs recognized in this report do not offer natural ventilation.

**4.0 DESIGN AND 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 masonry and 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® FVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square feet (18.6 m<sup>2</sup>) 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 FV for every 400 square feet (37.2 m<sup>2</sup>) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final

\*Revised July 2015

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



grade or floor and finished exterior grade immediately under each opening.

**5.0 CONDITIONS OF USE**

The Smart Vent® FVs 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® FVs 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® FVs 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 Mechanically Operated Flood Vents (AC364), dated October 2013 (editorially revised May 2014).

**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).

TABLE 1—MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT®	1540-510	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
FloodVENT® Overhead Door	1540-524	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Overhead Door	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent® Stacker	1540-521	16" X 16"	400

For SI: 1 inch = 25.4 mm; 1 square foot = m<sup>2</sup>

MAY 2 2017

N

# 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.

SECTION A - PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owner's Name JOHN AND MELANIE MATHEWS		Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 119 FAIRVIEW PLACE		Company NAIC Number:
City NEPTUNE TOWNSHIP	State New Jersey	ZIP Code 07753
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) LOT 16, BLOCK 5306		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>RESIDENTIAL</u>		
A5. Latitude/Longitude: Lat. <u>40.193778</u> DEG. Long. <u>-74.041194</u> DEG. Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> 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 <u>8</u>		
A8. For a building with a crawlspace or enclosure(s):		
a) Square footage of crawlspace or enclosure(s) <u>1,714</u> sq ft		
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>9</u>		
c) Total net area offlood openings in A8.b <u>1,800</u> sq in		
d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
A9. For a building with an attached garage:		
a) Square footage of attached garage <u>0</u> sq ft		
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>0</u>		
c) Total net area of flood openings in A9.b <u>0</u> sq in		
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number NEPTUNE TOWNSHIP 340317		B2. County Name MONMOUTH		B3. State New Jersey	
B4. Map/Panel Number 34025C0333	B5. Suffix F	B6. FIRM Index Date 09/25/2009	B7. FIRM Panel Effective/ Revised Date 09/25/2009	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 9 FEET
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

*John E. Mathews*

**ELEVATION CERTIFICATE**

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

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 119 FAIRVIEW PLACE			Policy Number:
City NEPTUNE TOWNSHIP	State New Jersey	ZIP Code 07753	Company NAIC Number

**SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)**

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: GPS SMARTNET                      Vertical Datum: NAVD'88

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.

Check the measurement used.

- |  |       |  |                                 |
|--|-------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor) _____  | 6.84  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor _____  | 14.10 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only) _____  | N/A   | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| d) Attached garage (top of slab) _____   | N/A   | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) _____ | 12.93 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG) _____   | 6.38  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG) _____  | 8.25  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support _____                               | 6.38  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |

**SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION**

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 licensed land surveyor?     Yes     No                       Check here if attachments.

Certifier's Name WILLIAM E. McGRATH	License Number GS24194	Place Seal Here 
Title PRESIDENT		
Company Name McGRATH SURVEYING & WATERFRONT CONSULTING, LLC		
Address 321 MANTOLOKING ROAD, SUITE 2B		
City BRICK	State New Jersey	
Signature 	Date 05/10/2017	Telephone (848) 232-3820

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)  
 LOWEST EQUIPMENT SERVICING THE BUILDING IS AN AIR COND. INIT ON AN OUTSIDE PLATFORM ELEV. 12.93.  
 BOTTOM OF ELEC. METER ELEVATION 12.00.  
 PROPERTY IN FEMA "PRELIMINARY FLOOD INSURANCE RATE MAP" (1/30/2015) ZONE AE, BASE FLOOD ELEV. 10 FT.  
 THERE ARE NINE (9) SMARTVENT MODEL# 1540-510 INSTALLED IN THE PERIMETER FOUNDATION. ICC CERTIFICATION ATTACHED.

**ELEVATION CERTIFICATE**

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

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 119 FAIRVIEWPLACE			Policy Number: .....
City NEPTUNE TOWNSHIP	State New Jersey	ZIP Code 07753	Company NAIC Number

**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 1–2 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  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 or Owner's Authorized Representative's Name \_\_\_\_\_

Address _____	City _____	State _____	ZIP Code _____
Signature _____	Date _____	Telephone _____	

Comments

Check here if attachments.



# BUILDING PHOTOGRAPHS

See Instructions for Item A6.

OMB No. 1660-0008

Expiration Date: November 30, 2018

## ELEVATION CERTIFICATE

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 119 FAIRVIEW PLACE			Policy Number: _____
City NEPTUNE TOWNSHIP	State New Jersey	ZIP Code 07753	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.

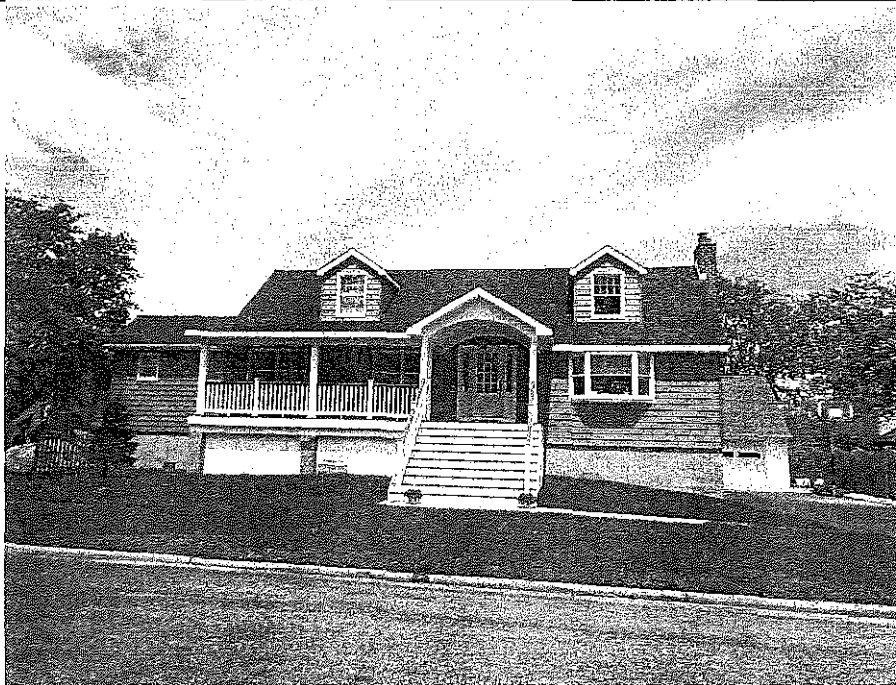


Photo One

Photo One Caption FRONT OF 119 FAIRVIEW DRIVE



Photo Two

Photo Two Caption REAR OF 119 FAIRVIEW PLACE

# BUILDING PHOTOGRAPHS

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

## ELEVATION CERTIFICATE

Continuation Page

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 119 FAIRVIEW PLACE			Policy Number:
City NEPTUNE TOWNSHIP	State New Jersey	ZIP Code 07753	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.

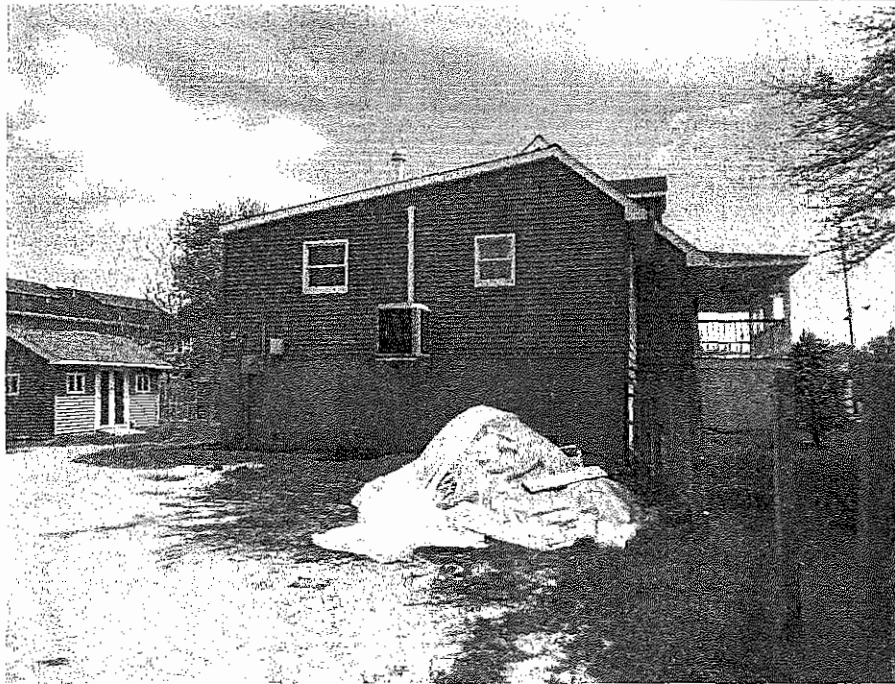


Photo One

Photo One Caption WEST SIDE OF 119 FAIRVIEW PLACE

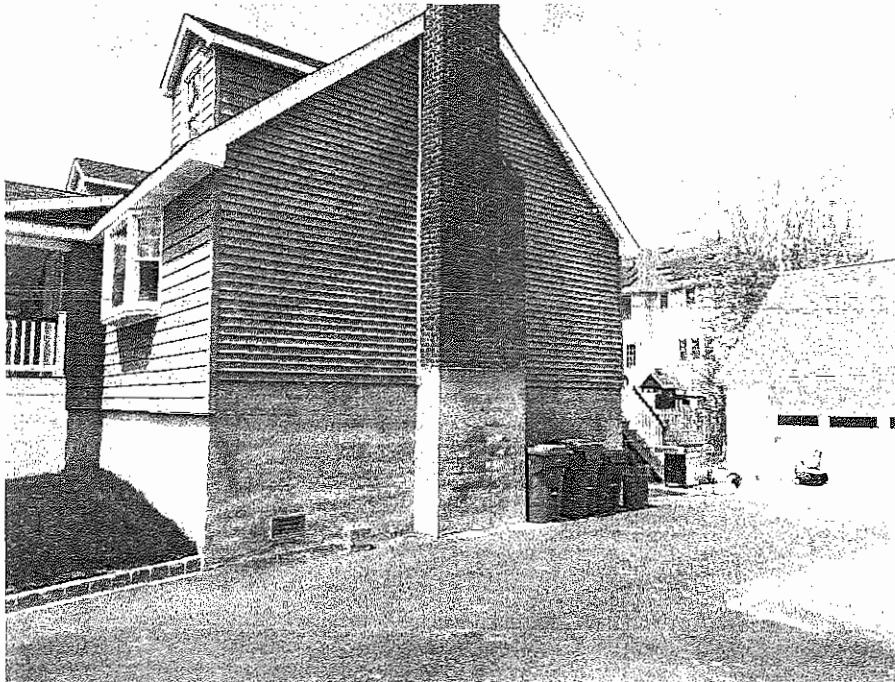


Photo Two

Photo Two Caption EAST SIDE OF 119 FAIRVIEW PLACE





ICC  
EVALUATION  
SERVICE

In Cooperation with



*Most Widely Accepted and Trusted*

# ICC-ES 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**



Look for the trusted marks of Conformity!

*"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"*



A Subsidiary of

*ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.*



# ICC-ES Evaluation Report

ESR-2074

Reissued February 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 EVALUATION SCOPE

Compliance with the following codes:

- 2015, 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2015, 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)<sup>†</sup>

<sup>†</sup>The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

**Properties evaluated:**

- Physical operation
- Water flow

## 2.0 USES

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

## 3.0 DESCRIPTION

### 3.1 General:

When subjected to rising water, the Smart Vent® FVs internal floats are activated, 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 FV 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 door to rotate out of the way and allow flow.

The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. 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 FVs comply with the design principle noted in Section 2.7.2.2 and Section 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)] 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 FVs must be installed in accordance with Section 4.0.

### 3.3 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 mm<sup>2</sup>) 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 mm<sup>2</sup>) of net free area to supply natural ventilation. Other FVs recognized in this report do not offer natural ventilation.

## 4.0 DESIGN AND 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. Installation clips allow mounting in masonry and concrete walls of any thickness. In order to comply with the engineered opening design principle noted in Section 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)], the Smart Vent® FVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square feet (18.6 m<sup>2</sup>) 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 FV for every 400 square feet (37.2 m<sup>2</sup>) of enclosed area.
- Below the base flood elevation.

- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final grade or floor and finished exterior grade immediately under each opening.

**5.0 CONDITIONS OF USE**

The Smart Vent® FVs 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® FVs 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® FVs 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 Mechanically Operated Flood Vents (AC364), dated August 2015.

**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).

TABLE 1—MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT®	1540-510	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
FloodVENT® Overhead Door	1540-524	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Overhead Door	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent® Stacker	1540-521	16" X 16"	400

For SI: 1 inch = 25.4 mm; 1 square foot = m<sup>2</sup>

# 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.

SECTION A - PROPERTY INFORMATION						FOR INSURANCE COMPANY USE
A1. Building Owner's Name JAMES SPINELLI & JACQUELINE SHARROCK						Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 104 MELROSE AVENUE						Company NAIC Number:
City NEPTUNE		State New Jersey		ZIP Code 07753		
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) LOT 5, BLOCK 5321						
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)						RESIDENTIAL
A5. Latitude/Longitude: Lat. <u>40.19174</u> Long. <u>-74.03982</u>						Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> 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 <u>6</u>						
A8. For a building with a crawlspace or enclosure(s):						
a) Square footage of crawlspace or enclosure(s) <u>967.20</u> sq ft						
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>6</u>						
c) Total net area of flood openings in A8.b <u>1230.00</u> sq in						
d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
A9. For a building with an attached garage:						
a) Square footage of attached garage <u>N/A</u> sq ft						
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>N/A</u>						
c) Total net area of flood openings in A9.b <u>N/A</u> sq in						
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION						<u>16-1701</u>
B1. NFIP Community Name & Community Number TOWNSHIP OF NEPTUNE 340317			B2. County Name MONMOUTH		B3. State New Jersey	
B4. Map/Panel Number 34025C0333	B5. Suffix F	B6. FIRM Index Date 09-25-2009	B7. FIRM Panel Effective/ Revised Date 09-25-2009	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 9.0	
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____						
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____						
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA						

**ELEVATION CERTIFICATE**

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

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 104 MELROSE AVENUE			Policy Number:
City NEPTUNE	State New Jersey	ZIP Code 07753	Company NAIC Number

**SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)**

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: LOCAL BENCH Vertical Datum: NAVD 1988

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.


Check the measurement used.


- |  |       |  |                                 |
|--|-------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)  | 6.32  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor  | 12.10 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)  | N/A   | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)   | N/A   | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) | 12.43 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)   | 5.79  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)  | 6.03  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                               | 5.97  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |

**SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION** 16-170

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 licensed land surveyor?  Yes  No  Check here if attachments.

Certifier's Name HOWARD A. TRANSUE	License Number GS33541	GS 33541 Place Seal Here  11/21/2018
Title PROFESSIONAL LAND SURVEYOR		
Company Name SCHAEFFER NASSAR SCHEIDEGG, CE, LLC		
Address 1425 CANTILLON BOULEVARD		
City MAYS LANDING	State New Jersey	

Signature 	Date 11-21-2018	Telephone (609) 625-7400	Ext.
--	--------------------	-----------------------------	------

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)  
ITEM A8b VENTS ARE CRAWL SPACE DOOR SYSTEMS FLOOD VENT MODEL 816CS RATED AT 205 SQ. IN. EACH.  
ITEM C2e IS THE A.C. PAD.

**ELEVATION CERTIFICATE**

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

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 104 MELROSE AVENUE			Policy Number:
City NEPTUNE	State New Jersey	ZIP Code 07753	Company NAIC Number

**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 1–2 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  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?  Yes  No  Unknown. The local official must certify this information in Section G.

**SECTION F – PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION** *16-170*

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

Check here if attachments.



# BUILDING PHOTOGRAPHS

See Instructions for Item A6.

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

## ELEVATION CERTIFICATE

**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.  
104 MELROSE AVENUE

Policy Number:

City NEPTUNE	State New Jersey	ZIP Code 07753
-----------------	---------------------	-------------------

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.

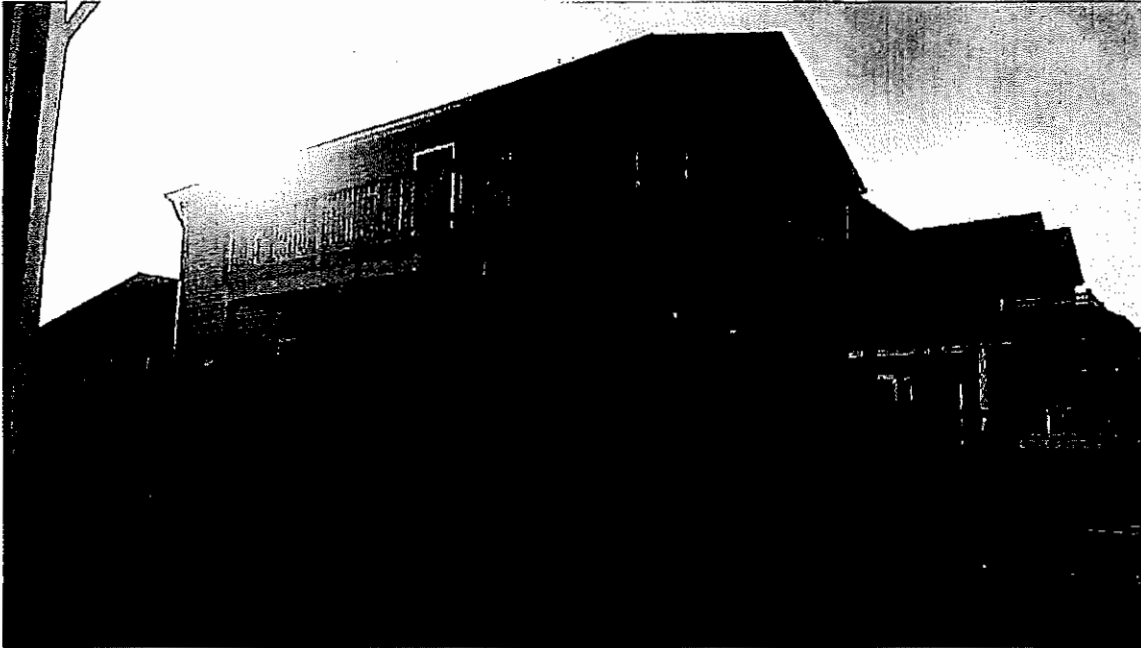


Photo One

Photo One Caption FRONT VIEW AND LEFT SIDE VIEW

16-170

Clear Photo One



Photo Two

Photo Two Caption FRONT VIEW AND RIGHT SIDE VIEW

Clear Photo Two



**ELEVATION CERTIFICATE**

**BUILDING PHOTOGRAPHS**

Continuation Page

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

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 104 MELROSE AVENUE			Policy Number:
City NEPTUNE	State New Jersey	ZIP Code 07753	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.

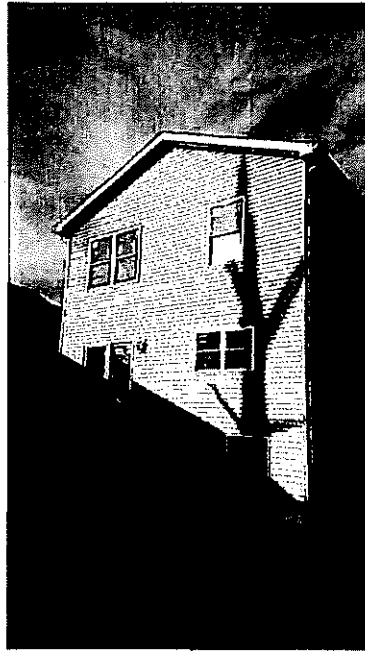


Photo Three

Photo Three Caption REAR VIEW

16-170

Clear Photo Three



Photo Four

Photo Four Caption CRAWL SPACE DOOR SYSTEMS FLOOL VENT MODEL 816CS TYPICAL OF 6

Clear Photo Four

# Certification of Engineered Flood Openings

In accordance with the Code of Federal Regulations for the National Flood Insurance Program

I hereby certify that the Crawl Space Door Systems flood vents 816CS, 1220CS, 1232CS, 1616CS, 1624CS, 1632CS, 2032CS, 2424CS, and 2436CS are designed in accordance with the requirements of the Code of Federal Regulations for the National Flood Insurance Program (NFIP) to provide automatic equalization of hydrostatic flood forces by allowing for the entry and exit of floodwaters, when properly installed and sized as set forth below. Vent opening measurements were measured and certified by Mr. Christopher Mark Loney, Virginia P.E. NO. 029000. Detailed calculations were prepared as outlined in "Review of certification of Engineered Flood Openings," prepared by Dr. Georg Reichard, Associate Professor of Building Construction, Virginia Tech (available upon request from Crawl Space Door Systems, Inc. billy@crawlspacedoors.com)

## Design Characteristics

Section 2.6.2.2 of ASCE/SEI 24-05 provides an equation to determine the required net area of engineered openings ( $A_o$ ) for a given enclosed area ( $A_e$ ). This equation is based on the hydraulic formula for the flow rate across sharp edged orifices. I have utilized this equation to calculate 1) the restricted flow rate through the main frame opening in case the louver is blown out during a flood event; 2) the flow rate through the individual openings between louver blades; and 3) the flow rate through projected openings between louver blades following hydraulic short-tube theory. The maximum total enclosed area ( $A_e$ ) that can be serviced by a single vent has then been determined by utilizing the lowest flow rate of the three assessed scenarios for each vent and is listed in Table 1. These values are based on the following assumptions:

- In absence of reliable data, the rates of rise and fall have been assumed at a minimum rate of 5 feet/hour;
- The (maximum) difference between the exterior and interior floodwater levels shall not exceed 1 foot during base flood conditions;
- A factor of safety of 5 has been assumed, which is consistent with design practices related to protection of life and property;
- The net area of openings ( $A_o$ ) as provided by the manufacturer.

*)	Model	H x W [in]	$A_o$ [in <sup>2</sup> ]	$A_e$ [ft <sup>2</sup> ]
<input checked="" type="checkbox"/>	816CS	8 x 16	105	205
<input type="checkbox"/>	1220CS	12 x 20	235	500
<input type="checkbox"/>	1232CS	12 x 32	305	645
<input type="checkbox"/>	1616CS	16 x 16	180	395
<input type="checkbox"/>	1624CS	16 x 24	310	670
<input type="checkbox"/>	1632CS	16 x 32	405	835
<input type="checkbox"/>	2032CS	20 x 32	630	1240
<input type="checkbox"/>	2424CS	24 x 24	570	1230
<input type="checkbox"/>	2436CS	24 x 36	850	1765

## Installation Requirements and Limitations

This certification will be voided if the following installation requirements and limitations are not enforced:

- There shall be a minimum of two openings on different sides of each enclosed area subject to flooding;
- The bottom of all openings shall be no higher than one foot above the higher of the interior or exterior grade that is immediately under each opening;
- No temporary (e.g. during cold weather) or permanent solid cover may be placed into or over the flood vent that would block the automatic entry or exit of floodwaters at any time;
- Where data or analyses indicate more rapid rates of rise and fall, the required number of openings shall be increased to account for those different conditions. The number or size of the openings may be decreased if data or analyses indicate rates of rise and fall are less than 5 feet per hour.

Table 1 Maximum total enclosed area ( $A_e$ ) that can be serviced by each individual model based on the given net area of engineered openings ( $A_o$ )

## Certifying Design Professional

Name **WILLIAMS, SWIDERSKI, P.E.**

Title **ENGINEER**

Company **SWIDERSKI ASSOCIATES**

Address **599 SHORE ROAD SOMERS POINT, NJ**

License **PROFESSIONAL ENGINEER**

License No. **24GE02048200**

Signature: 

Date: **11-10-17**



## Identification of the Building and Installed Flood Vents (By Others)

The flood vent models marked in Table 1\*) are being installed at the following building:

Building Address **104 MELROSE AVENUE, NEPTUNE, NJ 08753**