

FEDERAL EMERGENCY MANAGEMENT AGENCY  
NATIONAL FLOOD INSURANCE PROGRAM

O.M.B. No. 3067-0077  
Expires December 31, 2005

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1 - 7.

40/A1 06-132

<b>SECTION A - PROPERTY OWNER INFORMATION</b>			For Insurance Company Use:
BUILDING OWNER'S NAME MARCIA CHEW		Policy Number	
BUILDING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO. 702 WESLEY ROAD		Company NAIC Number	
CITY OCEAN CITY	STATE NJ	ZIP CODE 08226	
PROPERTY DESCRIPTION (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) LOT 5 BLOCK 70.55			
BUILDING USE (e.g., Residential, Non-residential, Addition, Accessory, etc. Use a Comments area, if necessary.) RESIDENTIAL			
LATITUDE/LONGITUDE (OPTIONAL) (##° - ##' - ##.###" or ###.####")	HORIZONTAL DATUM: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983	SOURCE: <input type="checkbox"/> GPS (Type): _____ <input type="checkbox"/> USGS Quad Map <input type="checkbox"/> Other: _____	

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

B1. NFIP COMMUNITY NAME & COMMUNITY NUMBER 345310 OCEAN CITY		B2. COUNTY NAME CAPE MAY		B3. STATE NEW JERSEY	
B4. MAP AND PANEL NUMBER 345310-0001	B5. SUFFIX C	B6. FIRM INDEX DATE 7-15-92	B7. FIRM PANEL EFFECTIVE/REVISED DATE 9-5-84	B8. FLOOD ZONE(S) A7	B9. BASE FLOOD ELEVATION(S) (Zone AO, use depth of flooding) 10 FT.

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in B9.  
 FIS Profile  FIRM  Community Determined  Other (Describe): \_\_\_\_\_

B11. Indicate the elevation datum used for the BFE in B9:  NGVD 1929  NAVD 1988  Other (Describe): \_\_\_\_\_

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?  Yes  No Designation Date \_\_\_\_\_

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

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. Building Diagram Number 8 (Select the building diagram most similar to the building for which this certificate is being completed - see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)

C3. 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 C3.-a-i below according to the building diagram specified in Item C2. State the datum used. If the datum is different from the datum used for the BFE in Section B, convert the datum to that used for the BFE. Show field measurements and datum conversion calculation. Use the space provided or the Comments area of Section D or Section G, as appropriate, to document the datum conversion.  
 Datum SAME Conversion/Comments NONE

Elevation reference mark used PRVT Does the elevation reference mark used appear on the FIRM?  Yes  No

- o a) Top of bottom floor (including basement or enclosure) 8. 1 ft.(m)
- o b) Top of next higher floor 10. 3 ft.(m)
- o c) Bottom of lowest horizontal structural member (V zones only) N/A. \_\_\_ft.(m)
- o d) Attached garage (top of slab) 8. 2 ft.(m)
- o e) Lowest elevation of machinery and/or equipment servicing the building (Describe in a Comments area) 10. 1 ft.(m)
- o f) Lowest adjacent (finished) grade (LAG) 8. 0 ft.(m)
- o g) Highest adjacent (finished) grade (HAG) 8. 4 ft.(m)
- o h) No. of permanent openings (flood vents) within 1 ft. above adjacent grade 10
- o i) Total area of all permanent openings (flood vents) in C3.h 2,000 sq. in. (sq. cm)

License Number, Embossed Seal, Signature, and Date

*(Handwritten Signature)*  
4/2/13 (REVISED)

**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 in Sections A, B, and C 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.

CERTIFIER'S NAME  
JAMES E. SCHWAB III

LICENSE NUMBER GS 33,536

TITLE LAND SURVEYOR	COMPANY NAME SCHWAB LAND SURVEYING AND PLANNING, LLC
ADDRESS 8 EAST 10TH STREET	CITY OCEAN CITY
SIGNATURE <i>(Handwritten Signature)</i>	STATE NJ
DATE 4/2/13 (REVISED)	ZIP CODE 08226
	TELEPHONE 609-398-0565

<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. 702 WESLEY ROAD			Policy Number
CITY OCEAN CITY	STATE NJ	ZIP CODE 08226	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

C3a IS CRAWL SPACE. C3b IS FIRST FLOOR AT FRONT DOOR THRESHOLD. C3e IS HVAC.

THERE ARE THREE VENTS IN THE GARAGE. THERE IS AN APARTMENT ABOVE THE GARAGE AT EL. 17.4.

THE GARAGE IS ATTACHED TO THE BUILDING BY AN ENCLOSED PORCH.

3/28/13 - REVISED TO SHOW ADDITION OF 10 SMART VENTS RATED AT 200 SQ. IN, NET FREE AREA EACH.

Check here if attachments

**SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)**

For Zone AO and Zone A (without BFE), complete Items E1 through E4. If the Elevation Certificate is intended for use as supporting information for a LOMA or LOMR-F, Section C must be completed.

- E1. Building Diagram Number \_\_ (Select the building diagram most similar to the building for which this certificate is being completed – see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)
- E2. The top of the bottom floor (including basement or enclosure) of the building is \_\_ ft.(m) \_\_ in.(cm)  above or  below (check one) the highest adjacent grade. (Use natural grade, if available).
- E3. For Building Diagrams 6-8 with openings (see page 7), the next higher floor or elevated floor (elevation b) of the building is \_\_ ft.(m) \_\_ in.(cm) above the highest adjacent grade. Complete items C3.h and C3.i on front of form.
- E4. The top of the platform of machinery and/or equipment servicing the building is \_\_ ft.(m) \_\_ in.(cm)  above or  below (check one) the highest adjacent grade. (Use natural grade, if available).
- E5. For 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, C (Items C3.h and C3.i only), 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, C, 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.

- G1.  The information in Section C was taken from other documentation that has been signed and embossed by a licensed surveyor, engineer, or architect who is authorized by state or local 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 20130675	G5. DATE PERMIT ISSUED 3/22/13	G6. DATE CERTIFICATE OF COMPLIANCE/OCCUPANCY ISSUED 4/5/13
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G7. This permit has been issued for:  New Construction  Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building is: \_\_\_\_\_ ft.(m) Datum: \_\_\_\_\_

G9. BFE or (in Zone AO) depth of flooding at the building site is: \_\_\_\_\_ ft.(m) Datum: \_\_\_\_\_

LOCAL OFFICIAL'S NAME TITLE

COMMUNITY NAME TELEPHONE

SIGNATURE DATE

COMMENTS

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

Reissued February 1, 2009

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

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

A Subsidiary of the International Code Council®

**DIVISION: 10—SPECIALTIES**  
**Section: 10230—Vents**
**REPORT HOLDER:**
**SMART VENT® , INC.**  
 450 ANDBRO DRIVE, SUITE 2B  
 PITMAN, NEW JERSEY 08071  
 (856) 307-1468  
[www.smartvent.com](http://www.smartvent.com)  
[eval@smartvent.com](mailto:eval@smartvent.com)
**EVALUATION SUBJECT:**
**SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS:**  
**FLOODVENT™ MODEL #1540-520; FLOODVENT™**  
**STACKING MODEL #1540-521; SMARTVENT™ MODEL**  
**#1540-510; SMARTVENT™ STACKING MODEL #1540-511;**  
**WOOD WALL FLOOD MODEL #1540-570; WOOD WALL**  
**FLOOD OVERHEAD DOOR MODEL #1540-574;**  
**FLOODVENT™ OVERHEAD DOOR MODEL #1540-524;**  
**SMARTVENT™ OVERHEAD DOOR MODEL #1540-514**
**1.0 EVALUATION SCOPE**
**Compliance with the following codes:**

- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)

**Properties evaluated:**

- Physical operation
- Water flow

**2.0 USES**

The Smart Vent® units are automatic foundation flood vents (AFFVs) employed to equalize hydrostatic pressure on nonfire-resistance-rated foundation walls, rolling-type overhead doors and building walls subject to rising or falling flood waters. Certain models also allow natural ventilation in accordance with Section 1203 of the IBC or Section 408.1 of the IRC.

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

When subjected to pressure from rising water, the Smart Vent® AFFVs disengage, then pivot open to allow flow in either direction to equalize water level and hydrostatic pressure from one side of the foundation to the other. The AFFV pivoting door is normally held in the closed position by a buoyant release device. When subjected to rising water, the buoyant release device causes the unit to

unlatch, allowing the plate to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel, and each opening provides 76 square inches (49 032 mm<sup>2</sup>) of net free area for flood mitigation in the open position. The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units each contain two vertically arranged openings per unit, providing 152 square inches (98 064 mm<sup>2</sup>) of net free area for flood mitigation in the open position.

**3.2 Engineered Opening:**

The AFFVs comply with the design principle noted in Section 2.6.2.2 of ASCE/SEI 24 for a maximum rate of rise and fall of 5.0 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Smart Vent AFFVs must be installed in accordance with Section 4.0.

**3.3 Model Sizes:**

The FloodVENT™ Model #1540-520, SmartVENT™ Model #1540-510, FloodVENT™ Overhead Door Model #1540-524, and SmartVENT™ Overhead Door Model #1540-514 units measure 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 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 (Smart Vent, Inc.), the model number, and the evaluation report number (ESR-2074).