

# ELEVATION CERTIFICATE

OMB No. 1660-0008  
Expires March 31, 2012

Important: Read the instructions on pages 1-9.

## SECTION A - PROPERTY INFORMATION

A1. Building Owner's Name PFEIFER, RALPH JOB #10513		For Insurance Company Use: Policy Number
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 179 92 <sup>ND</sup> STREET		Company NAIC Number
City STONE HARBOR State NJ ZIP Code 08247		
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) LOT 68, 69, 70 BLOCK 92.02		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>RESIDENTIAL</u>		<div style="border: 2px solid black; padding: 5px; transform: rotate(-5deg);"> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">RECEIVED</p> <p style="text-align: center;">JUN 15 2009</p> <p style="text-align: center;">BOROUGH OF STONE HARBOR CONSTRUCTION OFFICE</p> </div>
A5. Latitude/Longitude: Lat. <u>39° 3' 20.55"</u> Long. <u>-74° 45' 21"</u>		
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):		A9. For a building with an attached garage:
a) Square footage of crawlspace or enclosure(s) <u>2296</u> sq ft	a) Square footage of attached garage <u>N/A</u> sq ft	
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>12</u>	b) No. 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 A8.b <u>SECT D</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	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 BOROUGH OF STONE HARBOR 345323		B2. County Name CAPE MAY		B3. State NEW JERSEY	
B4. Map/Panel Number 345323-0001	B5. Suffix <u>C</u>	B6. FIRM Index Date <u>7/15/92</u>	B7. FIRM Panel Effective/Revised Date <u>7/15/92</u>	B8. Flood Zone(s) A7	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 10'

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 (Describe) \_\_\_\_\_

B11. Indicate elevation datum used for BFE in Item 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 \_\_\_\_\_  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. Use the same datum as the BFE.  
 Benchmark Utilized CMCMUA DISK SH-43 Vertical Datum 7.34'  
 Conversion/Comments N/A

Check the measurement used.

a) Top of bottom floor (including basement, crawlspace, or enclosure floor) <u>8.1</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
b) Top of the next higher floor <u>10.1</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
c) Bottom of the lowest horizontal structural member (V Zones only) <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
d) Attached garage (top of slab) <u>N/A</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) <u>11.1</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
f) Lowest adjacent (finished) grade next to building (LAG) <u>7.9</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
g) Highest adjacent (finished) grade next to building (HAG) <u>8.0</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support <u>N/A</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)

## 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

Certifier's Name THOMAS R DENEKA		License Number 35828	
Title NJPLS	Company Name STONE HARBOR SURVEYORS		
Address PO BOX 511	City STONE HARBOR	State NJ	ZIP Code 08247
Signature <i>Thomas R Deneke</i>	Date 5/20/09	Telephone 609-368-7451	

PLACE  
SEAL  
HERE

*Thomas R Deneke*

REVISED 6/11/09

<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. 179 92 <sup>ND</sup> STREET	Policy Number
City STONE HARBOR State NJ ZIP Code 08247	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 BUILDING HAS 10 SMART VENTS COVERING 200 SQUARE FEET EACH, MODEL #1540-510 AND 2 STANDARD VENTS @ 60 SQUARE INCHES EACH. C-2-E IS EXTERIOR HVAC.

Signature Thomas R. Smith Date 5/20/09 Revised 6/11/09  Check here if attachments

**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 and G9.

- 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 <u>08-8853</u>	G5. Date Permit Issued <u>9/4/08</u>	G6. Date Certificate of Compliance/Occupancy Issued <u>6/17/09</u> <u>(VARIANCE)</u> <u>FROM BOROUGH</u>
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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: 10.1  feet  meters (PR) Datum NGVD 29
- G9. BFE or (in Zone AO) depth of flooding at the building site: 10.0  feet  meters (PR) Datum NGVD 29
- G10. Community's design flood elevation: 10.0  feet  meters (PR) Datum NGVD 29

Local Official's Name MICHAEL COCHENSERE Title CONSTRUCTION OFFICIAL

Community Name STONE HARBOR Telephone 609-368-6814

Signature [Signature] Date 6/17/09

Comments \_\_\_\_\_

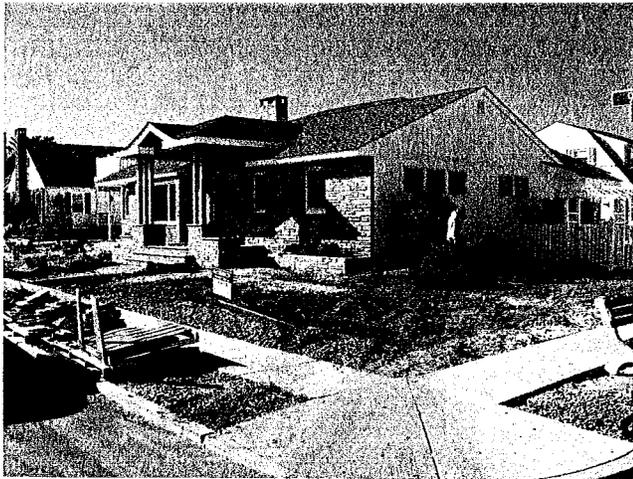
Check here if attachments

# Building Photographs

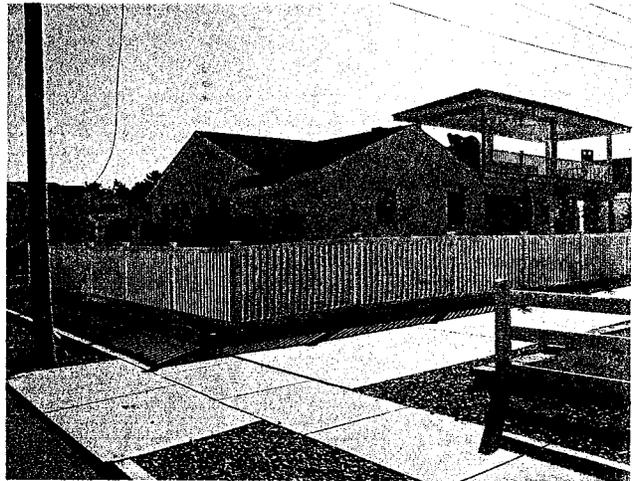
See Instructions for Item A6.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 179 92 <sup>ND</sup> STREET	For Insurance Company Use: Policy Number
City STONE HARBOR State NJ ZIP Code 08247	Company NAIC Number

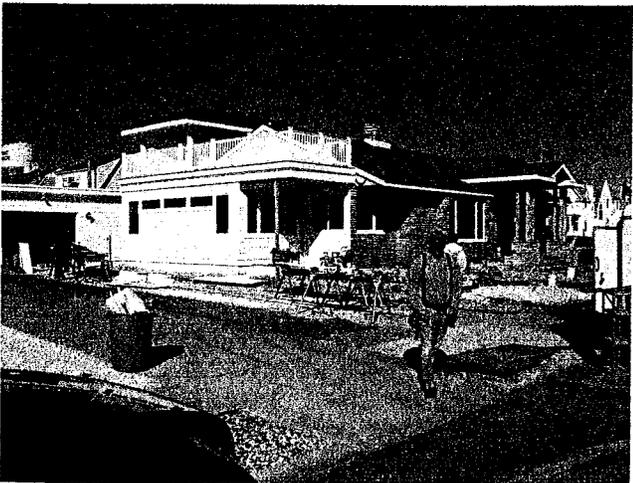
If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two building photographs below according to the instructions for Item A6. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." If submitting more photographs than will fit on this page, use the Continuation Page on the reverse.



**FRONT, RIGHT SIDE VIEW 5/19/09**



**REAR, RIGHT SIDE VIEW 5/19/09**



**FRONT, LEFT SIDE VIEW 5/19/09**

**ICC Evaluation Service, Inc.**  
**www.icc-es.org**

Business/Regional Office ■ 5360 Workman Mill Road, Whittier, California 90601 ■ (562) 699-0543  
Regional Office ■ 900 Montclair Road, Suite A, Birmingham, Alabama 35213 ■ (205) 599-9800  
Regional Office ■ 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 ■ (708) 799-2305

Legacy report on the 2000 *International Building Code*<sup>®</sup>, the 2000 *International Residential Code*<sup>®</sup>, the 2002 *Accumulative Supplement to the International Codes*<sup>™</sup>, the *BOCA National Building Code/1999*, the 1999 *Standard Building Code*<sup>®</sup>, the 1997 *Uniform Building Code*<sup>™</sup>, the 1998 *International One- and Two-Family Dwelling Code*<sup>®</sup>, the 1995 *CABO One- and Two-Family Dwelling Code*, the 1998 *International Mechanical Code*<sup>®</sup>, and the 1996 *International Mechanical Code*<sup>®</sup>

**DIVISION 10—SPECIALTIES**  
**Section 10230—Vents**

**SMART VENT® INC.**  
450 ANDBRO DR, SUITE 2B  
PITMAN, NJ 08071  
(877) 441-8368  
eval@smartvent.com  
[www.smartvent.com](http://www.smartvent.com)

**1.0 SUBJECT**

- 1.1 FloodVENT™ Model #1540-520
- 1.2 Smart VENT® Model #1540-510

**2.0 PROPERTY FOR WHICH EVALUATION IS SOUGHT**

- 2.1 Floodwater Venting
- 2.2 Natural Ventilation

**3.0 DESCRIPTION**

Smart VENT®, Inc.'s Smart VENT® Model #1540-510 and FloodVENT™ Model #1540-520 reduce hydrostatic pressures of floodwaters on foundations and buildings caused by rising and falling floodwater. They open automatically to rising floodwater pressure from any direction, quickly equalizing hydrostatic forces on both sides of the foundation wall.

The vents are designed to fit an 8 by 16 inch (203 by 406 mm) opening and provide a 76 square inches (49 020 mm<sup>2</sup>) net free area for flood mitigation. The vents are made from Type 304 Stainless Steel or better and have a screen cover with 1/4 square inch (161 mm<sup>2</sup>) holes. The vents have been tested to show that they meet the design principle of ASCE 24-98 and FEMA Technical Bulletin 1-93 for a minimum rate of rise and fall of 5.0 feet per hour (152 mm/s).

The vents pivoting door is locked in the closed position by means of a patented floating release device, which resists the entry of rodents and other pests. In the event of a flood, the rising water causes the release device to rise, while flowing flood water immediately opens the door, quickly equalizing the water level on both sides of the wall and thus equalizing the lateral forces on the foundation walls. In the event of fast

flowing floodwater, the patented floating device instantly uses the force of the flowing floodwater to open the door. The vents are completely bi-directional and automatically allow floodwater to exit as well as enter unobstructed through the foundation walls. In order to comply with the engineered opening requirement, one vent unit is required for every 200 square feet (19 m) of enclosed area below the base flood elevation to meet flood mitigation requirements.

The Smart VENT® is also capable of providing 50 square inches (0.30 m<sup>2</sup>) of net free area to supply supplemental natural ventilation to occupiable and habitable rooms and spaces and as a supplemental opening to an under-floor space between the bottom of the floor joist and the earth under any building.

**4.0 INSTALLATION**

Smart VENT® and FloodVENT™ are designed to be installed into foundation walls of existing and new construction without the use of tools completely from the exterior side of the wall. The installation of the vents shall be in accordance with the manufacturer's instructions dated February 21, 2003, and this evaluation report. The patented mounting straps allow mounting in wood and masonry walls up to 12 inches (305 mm) thick. One vent unit is required for every 200 square feet (19 m) of enclosed area below the base flood elevation to meet flood mitigation requirements.

**4.1 EXISTING BUILDING INSTALLATION**

Smart VENT® and FloodVENT™ are installed into foundation walls of existing buildings located in flood prone areas. Remove existing 8 by 16 inch (203 by 406 mm) foundation vents found within 12 inches (305 mm) of the ground and clean the opening in accordance with the instructions. If there are not sufficient number of existing vents as required by code for the size of the enclosed area, cut an additional 8 by 16 (203 by 406 mm) opening in the foundation walls for each vent required. Install in accordance with the instructions.

**4.2 NEW CONSTRUCTION INSTALLATION**

For each vent required, provide a standard 8 by 16 inch (203 by 406 mm) hole in the foundation walls, 12 inches (305 mm) or less above grade. The wall face must be vertical, flat and smooth. The vent's frame is first installed into the wall using

*ICC-ES legacy 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, Inc., express or implied, as to any finding or other matter in this report, or as to any product covered by the report.*



# Engineered Flood Openings Certificate

## To satisfy requirements of the National Flood Insurance Program

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

The Smart VENT® and Flood VENT™ Foundation Flood Vent is certified as meeting the flood opening requirements for engineered openings as set forth in the Federal Emergency Management Agency's National Flood Insurance Program regulations (44 CFR 60.3(c)(5)) and ASCE 24-98, provided it is installed according to the those references, as summarized below. Flood openings are required in enclosures below elevated buildings, attached and detached garages, and accessory structures that meet the required limitations. For a copy of the report documenting this certification dated June 21, 2002, and a copy of the National Evaluation Service report NER 624, contact Smart VENT, Inc., at 877/441-8368 or visit:

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

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

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

Signature *Robert D. Green*  
Title Professional Engineer  
Type of License Professional Engineering  
License Number NJ PE GE26637



Professional Seal

\*Project Name \_\_\_\_\_  
\*Project Address \_\_\_\_\_  
\*Date Submitted \_\_\_\_\_  
\* Required Fields\*

### Installation Limitations and Instructions

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

"REFERENCE ONLY" From FEMA TB 1-93

### Guidance for Engineered Openings Openings in Foundation Walls

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

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

Form: SMRT100 Rev.A July 2002

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