

DEPARTMENT OF HOMELAND SECURITY  
Federal Emergency Management Agency  
**ELEVATION CERTIFICATE**

**IMPORTANT: FOLLOW THE INSTRUCTIONS ON PAGES 9-16**

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

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.					
<b>SECTION A - PROPERTY INFORMATION</b>				<b>FORM INSURANCE COMPANY USE</b>	
A1. Building Owner's Name Mark Arbeit				Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 13 N. Rumson Ave.				Company NAIC Number:	
City CITY OF MARGATE		State NJ		Zip Code 08402	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Lot 3 and Block 218					
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL					
A5. Latitude/Longitude: Lat. N 39.3264 Long. W 074.5095 Horizontal Datum: <input type="radio"/> NAD 1927 <input checked="" type="radio"/> NAD 1983					
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.					
A7. Building Diagram Number 8					
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) 1200 sq. ft. sq ft			a) Square footage of attached garage N/A sq ft		
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade *6			b) Number of permanent flood openings in the attached garage within 1.0 foot N/A above adjacent grade		
c) Total net area of flood openings in A8.b *1200 sq in			c) Total net area of flood openings in A9.b N/A sq in		
d) Engineered flood openings? <input checked="" type="radio"/> Yes <input type="radio"/> No			d) Engineered flood openings? <input type="radio"/> Yes <input checked="" type="radio"/> No		
<b>SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION</b>					
B1. NFIP Community Name & Community Number CITY OF MARGATE & 345304			B2. County Name ATLANTIC COUNTY		B3. State NJ
B4. Map/Panel Number 345304 / 0001	B5. Suffix C	B6. FIRM Index Date No index printed	B7. FIRM Panel Effective/ Revised Date 10/18/1983	B8. Flood Zone(s) A8**	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: <input type="radio"/> FIS Profile <input checked="" type="radio"/> FIRM <input type="radio"/> Community Determined <input type="radio"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input checked="" type="radio"/> NGVD 1929 <input type="radio"/> NAVD 1988 <input type="radio"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="radio"/> Yes <input checked="" type="radio"/> No Designation Date: <input type="radio"/> CBRS <input type="radio"/> OPA					
<b>SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)</b>					
C1. Building elevations are based on: <input type="radio"/> Construction Drawings* <input type="radio"/> Building Under Construction* <input checked="" type="radio"/> Finished Construction					
C2. Elevations - Zones A1 - A30, AE, AH, A (with BFE), VE, V1 - V30, V (with BFE), AR, AR/A, AR/AE, AR/A1 - A30, AR/AH, AR/AO. Complete Items C2.a - h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.					
* A new Elevation Certificate will be required when construction of the building is complete.					
Benchmark Utilized: private Vertical Datum: NGVD29					
Indicate elevation datum used for the elevations in items a) through h) below. <input checked="" type="radio"/> NGVD 1929 <input type="radio"/> NAVD 1988 <input type="radio"/> Other/Source: _____					
Datum used for building elevations must be the same as that used for the BFE. Check the measurement used.					
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)		9.0	-		<input checked="" type="radio"/> feet <input type="radio"/> meters
b) Top of the next higher floor		12.4	-		<input checked="" type="radio"/> feet <input type="radio"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only)		N/A	-		<input checked="" type="radio"/> feet <input type="radio"/> meters
d) Attached garage (top of slab)		N/A	-		<input checked="" type="radio"/> feet <input type="radio"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)		10.5****	-		<input checked="" type="radio"/> feet <input type="radio"/> meters
f) Lowest adjacent (finished) grade next to building (LAG)		8.4	-		<input checked="" type="radio"/> feet <input type="radio"/> meters
g) Highest adjacent (finished) grade next to building (HAG)		9.1	-		<input checked="" type="radio"/> feet <input type="radio"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support		8.2	-		<input checked="" type="radio"/> feet <input type="radio"/> meters




# ELEVATION CERTIFICATE

OMB Control Number: 1660-0008  
Expiration: 11/30/2018  
08402

13 N. Rumson Ave.

CITY OF MARGATE

NJ

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION						
<p>This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.</p>						
<p>Were latitude and longitude in Section A provided by a licensed land surveyor?</p> <p><input checked="" type="radio"/> Yes    <input type="radio"/> No</p>		PLACE SEAL HERE				
<p><input checked="" type="checkbox"/> Check here if attachments.</p>						
<p>Certifier's Name Paul M. Koelling, PLS, CFM</p>					<p>License Number NJ24GS 04328800</p>	
<p>Title Licensed Land Surveyor</p>					<p>Company Name Paul Koelling&amp;AssocLLC-COA24GA28256300</p>	
<p>Address 2161 Shore Road</p>					<p>City Linwood</p>	
		<p>State NJ</p>	<p>Zip Code 08221</p>			
<p>Signature </p>		<p>Date 3/08/2016</p>	<p>Telephone +1 (609) 927-0279</p>			
<p>Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.</p>						
<p>Comments (including type of equipment and location, per C2(e), if applicable):</p> <p>*A8b.) Smart Vents Model #1540-510 engineered for 200 square inches of net area each</p> <p>**B8 &amp; B9.) FEMA Pre-FIRM Zone "AE".....Base Flood Elevation 9 ft. (NAVD88) converted = 10.3 ft. (NGVD29)</p> <p>***C2a.) crawlspace enclosure</p> <p>****C2e.) exterior air unit elev. 11.6, ductwork elev. 10.5, furnace elev. 12.3, water heater elev. 13.0, electrical outlet elev. 12.8</p> <p>Note: dwelling has a 25 sq. foot attached shed and 20 sq. ft. entrance steps area</p>						
<p>Signature </p>		<p>Date 3/08/2016</p>				
SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)						
<p>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.</p>						
<p>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).</p> <p>a) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ - _____ <input type="radio"/> feet <input type="radio"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.</p> <p>b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ - _____ <input type="radio"/> feet <input type="radio"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the LAG.</p>						
<p>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 _____ - _____ <input type="radio"/> feet <input type="radio"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.</p>						
<p>E3. Attached garage (top of slab) is _____ - _____ <input type="radio"/> feet <input type="radio"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.</p>						
<p>E4. Top of platform of machinery and /or equipment servicing the building is _____ - _____ <input type="radio"/> feet <input type="radio"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.</p>						
<p>E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown. The local official must certify this information in Section G.</p>						
SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION						
<p>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.</p>						
<p>Property Owner or Owner's Authorized Representative's Name:</p>						
<p>Address</p>		<p>City</p>	<p>State</p>	<p>ZIP Code</p>		
<p>Signature </p>		<p>Date 3/14/16</p>	<p>Telephone</p>			
<p>Comments</p>						
<p><input type="checkbox"/> Check here if attachments.</p>						



# Building Photographs

See Instructions for Item A6.

For Insurance Company Use:

Building Street Address (including Apt., Unit, Suite, and/or Bldg.) No. or P.O. Route and Box No.  
**13 N. Rumson Ave.**

Policy Number

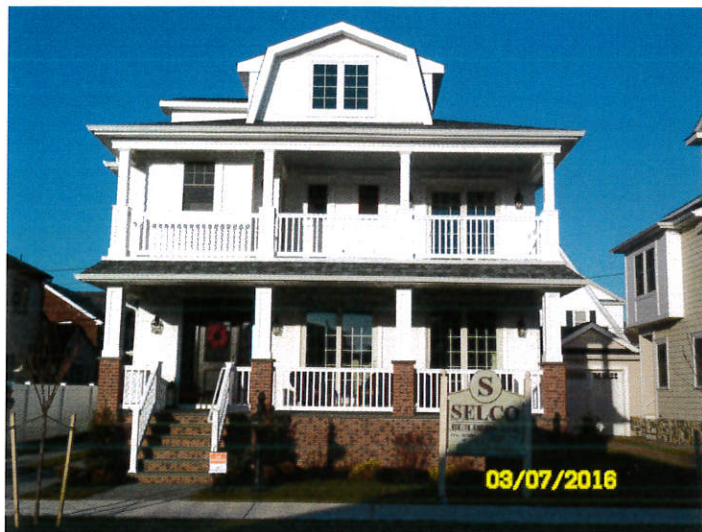
City  
**Margate**

State  
**NJ**

ZIP Code  
**08402**

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 View – Date of Photograph: (See Photo Stamp)



Rear View – Date of Photograph: (See Photo Stamp)



Right Side View – Date of Photograph: (See Photo Stamp)



Vent View – Date of Photograph: (See Photo Stamp)

# ICC-ES Evaluation Report

**ESR-2074**
*Reissued February 1, 2009*
*This report is subject to re-examination in two years.*
**www.icc-es.org | (800) 423-6567 | (562) 699-0543**
**A Subsidiary of the International Code Council®**
**DIVISION: 10—SPECIALTIES  
Section: 10230—Vents**
**REPORT HOLDER:**

**SMART VENT®, INC.**  
460 ANDRO DRIVE, SUITE 2B  
PITMAN, NEW JERSEY 08071  
(856) 307-1488  
[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 6<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 1/8-inch-by-1/8-inch (8.35 by 8.35 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