U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency

ELEVATION CERTIFICATE

OMB No. 1660-0008 Expires March 31, 2012

National Flood Insurance Program

Important: Read the instructions on pages 1-9.

SFC	TION A - PROPERTY INFORMA	ATION For Insurance Company Use:			
Building Owner's Name The Moretti's		Policy Number			
A2. Building Street Address (including Apt., Unit, Suite, and/or 3600 Monmouth Ave.	Company NAIC Number				
City LONGPORT State NJ ZIP Code 08403		new home			
A3. Property Description (Lot and Block Numbers, Tax Parcel Block 115 lot 9	Number, Legal Description, etc.)	10000 - cg., e			
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential A5. Latitude/Longitude: Lat. N 39.3219 Long. W 074.5209					
SECTION B - FLOOD	INSURANCE RATE MAP (FIRM	I) INFORMATION			
B1. NFIP Community Name & Community Number Borough of Longport 345302	B2. County Name Atlantic	B3. State NJ			
B4. Map/Panel Number B5. Suffix B6. FIRM Index 345302 / 0001 B Date No Index Printed	Effective/Revised Date	B8. Flood B9. Base Flood Elevation(s) (Zone Zone(s) AO, use base flood depth) A8 10.0			
☐ FIS Profile ☐ FIRM ☐ Community Determined ☐ Other (Describe) P11 Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☐ NAVD 1988 ☐ Other (Describe) 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 (S	URVEY REQUIRED)			
C1. Building elevations are based on: Construction Drawings* Building Under 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 NGS PID 2419 Vertical Datum NGVD88					
Conversion/Comments Survey Datum + 1.283 = BFE Datur	72	theck the measurement used.			
 a) Top of bottom floor (including basement, crawlspace, o b) Top of the next higher floor c) Bottom of the lowest horizontal structural member (V Zo d) Attached garage (top of slab) e) Lowest elevation of machinery or equipment servicing to (Describe type of equipment and location in Comments 	r enclosure floor) $\underline{6.7}$ \boxtimes fee $\underline{12.0}$ \boxtimes fee ones only) $\underline{n/a}$. \boxtimes fee $\underline{n/a}$. \boxtimes fee the building $\underline{**}.**$ \boxtimes fee	t meters (Puerto Rico only) t meters (Puerto Rico only) t meters (Puerto Rico only) t meters (Puerto Rico only) t meters (Puerto Rico only) t meters (Puerto Rico only)			
 f) Lowest adjacent (finished) grade next to building (LAG) g) Highest adjacent (finished) grade next to building (HAG) h) Lowest adjacent grade at lowest elevation of deck or st structural support 	6.6 ⊠ fee 6.8 ⊠ fee	t meters (Puerto Rico only) t meters (Puerto Rico only) t 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 Sect licensed land surveyor?	LAGE			
tifier's Name Paul H. Koelling, PLS	License Number N				
Title Licensed Land Surveyor Company Name PAUL H. KOELLING & ASSOCIATES, LLC					
Address 2161 Shore Road City Linwood	State NJ	ZIP Code 08221			
Signature Date	11/1/11 Telephone (609)9	27-0279			

Building Photographs

	See Instructions for	r Item A6.	For Insurance Company Use:
Building Street Address (included a 3600 Monmouth Ave	uding Apt., Unit, Suite, and/or Bldg.) No. o	r P.O. Route and Box No.	Policy Number
City Longport	State NJ	ZIP Code 08403	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)

Left Side 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) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 10—SPECIALTIES Section: 10230—Vents

REPORT HOLDER:

SMART VENT®, INC.
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PITMAN, NEW JERSEY 08071
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www.smartvent.com
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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 mm²) 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 mm²) 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 15³/₄ inches wide by 7³/₄ 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 8³/₄ 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 mm²) 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 mm²) 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

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

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 Sq.Ft / 200 = 10 Vents

Signature Colect Leasurer Title Professional Engineer	×.	OF NEW
Type of License Professional Engineering License Number NJ PE GE26637		66 7 6111
*Project Name *Project Address		10 MAS
*Date Submitted * Required Fields*		Professional Seal

Installation Limitations and Instructions

- 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.
- 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.
- Each enclosed area shall have at least two flood openings, installed on different sides of the enclosed area.
 The bottom of the flood openings shall be no more than one foot above the adjacent finished ground level.
- 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)

Form: SMRT100 Rev.A July 2002

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