U.S. DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY National Flood Insurance Program

ELEVATION CERTIFICATE

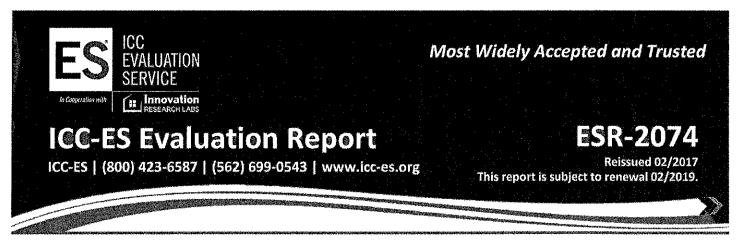
Important: Read the instructions on pages 1-9.

OMB No. 1660-0008

Expiration Date: July 31, 2015

SECTION A - PROPERTY INFORMATION	FOR INSURANCE COMPANY USE
Building Owner's Name SWARTZ	Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 9 SOUTH RUMSON AVENUE	Company NAIC Number:
City MARGATE CITY State NJ ZIP Code 08402	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) BLOCK 118 LOT 4	
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL A5. Latitude/Longitude: Lat. 38°19'27.8" Long. 74°30'27.9" 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 8/ A8. For a building with a crawlspace or enclosure(s): A9. For a building with an approximate the provided support of the pr	attached garage sq ft ent flood openings in the attached garage ve adjacent grade ood openings in A9.b sq in
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMAT	TION
B1. NFIP Community Name & Community Number MARGATE 345304 B2. County Name ATLANTIC	B3. State NEW JERSEY
B4. Map/Panel Number 34001C0434 B5. Suffix F 1/30/15 B6. FIRM Index Date Effective/Revised Date 1/30/15 AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 9.00'
☐ FIS Profile ☐ FIRM ☐ Community Determined ☐ Other/Source: 111. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☐ NAVD 1988 ☐ Other/Source Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA) Designation Date: ☐ CBRS ☐ OPA	ce: PRELIMINARY FIRM MAP ?
SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQ	UIRED)
**A new Elevation Certificate will be required when construction of the building is complete. 2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, Abelow according to the building diagram specified in Item A7. In Puerto Rico only, enter meters. Benchmark Utilized: RM-4 Vertical Datum: NAVD 1988 Indicate elevation datum used for the elevations in items a) through h) below. NGVD 1929 NAVD 1988 Indicate elevation datum used for the elevations in items a) through h) below. NGVD 1929 NAVD 1988 Top of bottom floor (including basement, crawlspace, or enclosure floor) b) Top of the next higher floor c) Bottom of the lowest horizontal structural member (V Zones only) d) Attached garage (top of slab) e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	4/29/15
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 stairs, including structural support 6.98	☐ feet ☐ meters ☐ me
SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION	TION
This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify electinformation. 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 Check here if attachments. Iicensed land surveyor? Yes Notifier's Name DANIEL J. PONZIO, SR. License Number GS37603 Title LAND SURVEYOR Company Name ARTHUR W. PONZIO COMPANY Address 400 NOLTH DOVER AVENUE City ATLANTIC CITY State NJ ZIP Code 08401 Signature Date 4/29/15 Telephone 609-344-8194	

RTANT: In these spaces, copy the corresponding informal inding Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. SOUTH RUMSON AVENUE City MARGATE CITY SECTION D – SURVEYOR, ENGINEER, O Copy both sides of this Elevation Certificate for (1) community official, (2) insection of the community official in the community official in the community official in the corresponding information in the corresponding in the correspondi	. Route and Box No. e NJ ZIP Code 08402 R ARCHITECT CERTIFICATIO	Policy Number: Company NAIC Number: ON (CONTINUED)
SECTION D – SURVEYOR, ENGINEER, O Copy both sides of this Elevation Certificate for (1) community official, (2) ins Comments 31888 **GENERATOR ELEV= 11.10' HEATER ELEV=11.20	e NJ ZIP Code 08402	Company NAIC Number
SECTION D – SURVEYOR, ENGINEER, O Copy both sides of this Elevation Certificate for (1) community official, (2) ins Comments 31998 **GENERATOR ELEV= 11.10' HEATER ELEV=11.20	R ARCHITECT CERTIFICATIO	The state of the s
Copy both sides of this Elevation Certificate for (1) community official, (2) ins		ON (CONTINUED)
Comments 31969 **GENERATOR ELEV= 11.10' HEATER ELEV =11.20	surance agent/company, and (3) bu	
Comments 21932 **GENERATOR ELEV= 11.10' HEATER ELEV = 11.20 /ENT MODEL 1540-110 ***ELEX- DITACHED GARAGE = 8.25'		
Ind hands	o' BOTTOM OF DUCT ELEV=10.00	0' A/C UNIT ELEVATION= 11.10' SMART
Signature	Date 4/29/15	
SECTION E - BUILDING ELEVATION INFORMATION (SURVE	Y NOT REQUIRED) FOR ZON	IE AO AND ZONE A (WITHOUT BFE)
For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate	e 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 measure E1. Provide elevation information for the following and check the appropria		
grade (HAG) and the lowest adjacent grade (LAG). a) Top of bottom floor (including basement, crawlspace, or enclosure) b) Top of bottom floor (including basement, crawlspace, or enclosure) E2. For Building Diagrams 6–9 with permanent flood openings provided in (elevation C2.b in the diagrams) of the building is	is feet	eters above or below the HAG. eters above or below the LAG. eters above or below the LAG. eters above or below the hag. eters above or below the HAG.
ordinance? Yes No Unknown. The local official must ce	rtify this information in Section G.	
SECTION F - PROPERTY OWNER (OR O	WNER'S REPRESENTATIVE)	CERTIFICATION
the property owner or owner's authorized representative who completes Sec or Zone AO must sign here. The statements in Sections A, B, and E are corre	ctions A, B, and E for Zone A (without to the best of my knowledge.	out a FEMA-issued or community-issued BFE)
y Owner's or Owner's Authorized Representative's Name		
Address	City	State ZIP Code
ignature	Date	Telephone
Comments		
		☐ Check here if attachmen
SECTION G – COMMUNIT e local official who is authorized by law or ordinance to administer the commun	Y INFORMATION (OPTIONAL	
this Elevation Certificate. Complete the applicable item(s) and sign below. Che	eck the measurement used in Items	G8–G10. In Puerto Rico only, enter meters.
. The information in Section C was taken from other documentation the is authorized by law to certify elevation information. (Indicate the so	nat has been signed and sealed by a	a licensed surveyor, engineer, or architect who in the Comments area below.)
A community official completed Section E for a building located in Zo		
The following information (Items G4–G10) is provided for community		
64. Permit Number G5. Date Permit Issued	G6. Date Certificate	Of Compliance/Occupancy Issued
This permit has been issued for: ☐ New Construction ☐ Sub	ostantial Improvement	
Elevation of as-built lowest floor (including basement) of the building:	feet meter	rs Datum
BEE or (in Zone AO) depth of flooding at the building site:	leet meter	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT
O. Community's design flood elevation:	feet	26-51 TG
ocal Official's Name JAMES GALANTINO	Title CONSTRUCTION	N OFFICIAL
= 11m/1/70		
	18 22/19	<i>14</i>
	Date //50/5	(7



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



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ICC-ES Evaluation Report

ESR-2074

Reissued February 2017 Revised November 2017

This report is subject to renewal February 2019.

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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 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)[†]

[†]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 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 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 m²) 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 $400 \text{ square feet } (37.2 \text{ m}^2) \text{ of enclosed area.}$

- 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 ³ / ₄ " X 7 ³ / ₄ "	200
SmartVENT [®]	1540-510	15 ³ / ₄ " X 7 ³ / ₄ "	200
FloodVENT [®] Overhead Door	1540-524	15 ³ / ₄ " X 7 ³ / ₄ "	200
SmartVENT [®] Overhead Door	1540-514	15 ³ / ₄ " X 7 ³ / ₄ "	200
Wood Wall FloodVENT®	1540-570	14" X 8 ³ / ₄ "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 ³ / ₄ "	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 = m²

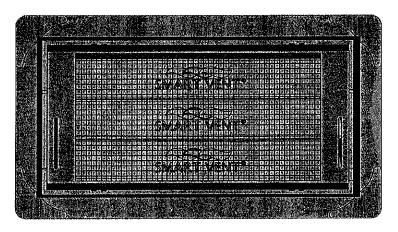


FIGURE 1—SMART VENT: MODEL 1540-510

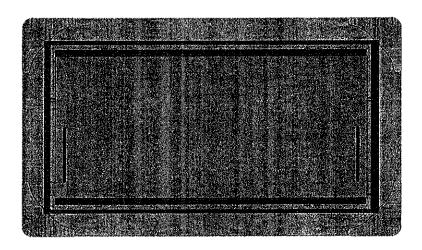


FIGURE 2-SMART VENT MODEL 1540-520

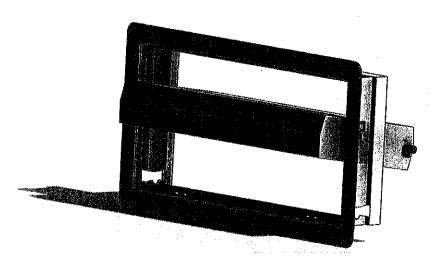


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN