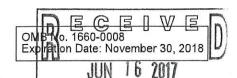
U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency National Flood Insurance Program





ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

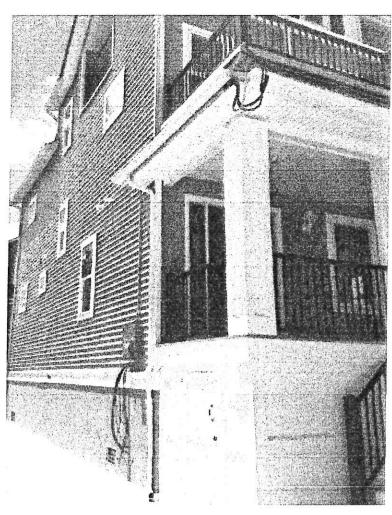
Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agenticompany, and (3) building owner.

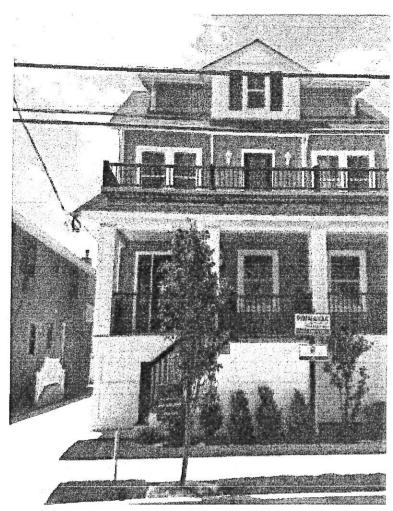
SECTION A - PROPERTY INFORMATION						FOR INSUI	RANCE COMPANY USE
A1. Building Owner's Name							ıber:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 26 N. HUNTINGTON AVENUE							NAIC Number:
City State MARGATE New Jersey						ZIP Code	
A3. Property Desc LOT 19, BLOCK 2	V.*3	nd Block Numbers, Tax	x Parce	el Number, Legal De	escription, etc.)		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL							
A5. Latitude/Longitude: Lat. 39-14-16 Long74-37-19 Horizontal Datu						: X NAD	1927 NAD 1983
A6. Attach at least	2 photograpl	ns of the building if the	Certific	cate is being used to	o obtain flood insura	nce.	
A7. Building Diagra	am Number	8					
A8. For a building	with a crawls	pace or enclosure(s):					
a) Square foo	tage of crawl:	space or enclosure(s)	2000	928 sq ft			
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade5							
c) Total net area of flood openings in A8.b 1,000 sq in							
d) Engineered flood openings? Yes No							
A9. For a building with an attached garage:							
a) Square footage of attached garage 0 sq ft							
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 0							
c) Total net area of flood openings in A9.b 0 sq in							
d) Engineered flood openings? Yes No							
a) Engineered 11000 openings? res No							
	SE	CTION B - FLOOD IN	ISURA	NCE RATE MAP	(FIRM) INFORMA	TION	,
B1. NFIP Community Name & Community Number MARGATE 3453040001 C			B2. County Name ATLANTIC			B3. State New Jersey	
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	E	IRM Panel ffective/ evised Date	B8. Flood Zone(s)	(Zor	se Flood Elevation(s) ne AO, use Base nd Depth)
345304-0001	С	10/18/1983	0.0000000000000000000000000000000000000	/1983	A8	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/Source:							
B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/Source:							
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes No							
Designation Date: CBRS OPA							
Designation Date CDRS OFA							

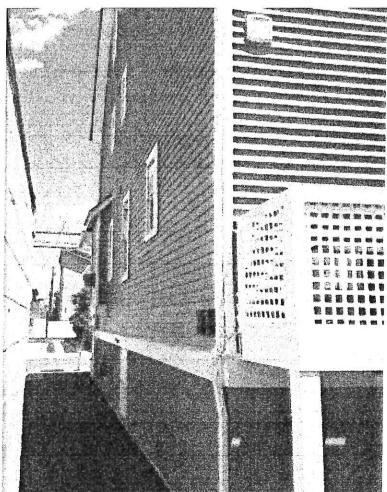
ELEVATION CERTIFICATE

OMB No. 1660-0008 Expiration Date: November 30, 2018

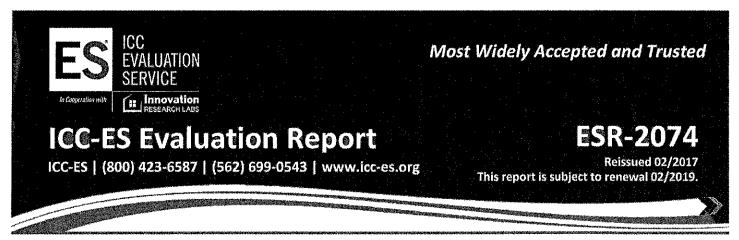
MPORTANT: In these spaces, copy the corresponding information from Section A. FOR INSURANCE COMPA					
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Ro 26 N. HUNTINGTON AVENUE	oute and Box No.	Policy Number:			
City State ZIF MARGATE New Jersey	Code	Company NAIC Number			
SECTION C – BUILDING ELEVATION INFORMA	TION (SURVEY RI	EQUIRED)			
C1. Building elevations are based on: Construction Drawings* Bu *A new Elevation Certificate will be required when construction of the build C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with E Complete Items C2.a–h below according to the building diagram specified Benchmark Utilized: LOCAL Vertical Datum Indicate elevation datum used for the elevations in items a) through h) below NGVD 1929 NAVD 1988 Other/Source: Datum used for building elevations must be the same as that used for the a) Top of bottom floor (including basement, crawlspace, or enclosure floop) 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)	ilding Under Construiting is complete. BFE), AR, AR/A, AR/ in Item A7. In Puert NGVD 1929 bw. BFE.	Check the measurement used. X Finished Construction X AR A1 A30, AR AH, AR AO. O Rico only, enter meters. Check the measurement used. X feet			
f) Lowest adjacent (finished) grade next to building (LAG)		X feet meters			
g) Highest adjacent (finished) grade next to building (HAG)	<u>6</u> . <u>7</u>	X feet meters			
 h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support 	6, 6	X feet meters .			
SECTION D – SURVEYOR, ENGINEER, OR AR	CHITECT CERTIFI	CATION			
This certification is to be signed and sealed by a land surveyor, engineer, or and I certify that the information on this Certificate represents my best efforts to intestatement may be punishable by fine or imprisonment under 18 U.S. Code, Section 4 provided by a licensed land surveyor?	rpret the data availa ction 1001. —	law to certify elevation information. ble. I understand that any false Check here if attachments.			
Certifier's Name License Number					
THOMAS N. TOLBERT 38608					
Title PRESIDENT		Disco			
Company Name DESIGN LAND SURVEYING, P.A.		Place Seal			
Address P.O BOX 667		Here			
City State TURNERSVILLE New Jersey	ZIP Code 08012				
Signature Date 06/01/2017	Telephone (856) 374-1134				
Copy all pages of this Elevation Certificate and all attachments for (1) community of	fficial, (2) insurance a	gent/company, and (3) building owner.			
Comments (including type of equipment and location, per C2(e), if applicable) LOWEST MECHANICAL USED IS AC COMPRESSOR. FLOOD VENTS ARE S	MART VENTS MOD)EL #1540-520			











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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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

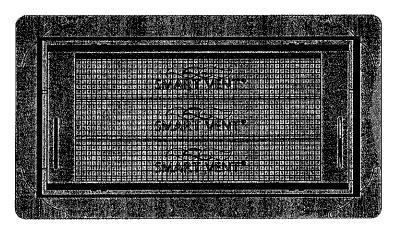


FIGURE 1—SMART VENT: MODEL 1540-510

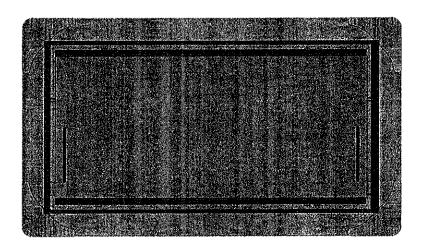


FIGURE 2-SMART VENT MODEL 1540-520

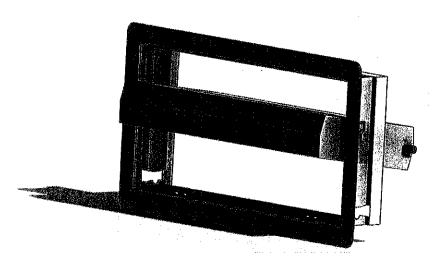


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN