# 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 o	fficial, (2) insu	rance agent/company	y, and (3) buildi	ng owner.
Copy all pages of this Elevation Certificate and all attachments for (1) community of SECTION A - PROPERTY INFORMATION		FORM INSURAL	NCE COMPAN	Y USE
A1. Building Owner's Name MASEL FAMILY 2012, LLC		Policy Number:		
<ul> <li>A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.</li> <li>Box No.</li> <li>110 SOUTH EXETER AVENUE</li> </ul>	O. Route and	Company NAIC Number:		
City MARGATE	State NJ	L	Zip Code 08	402
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal I BLOCK 6.01 LOT 13	Description, e	tc.)		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.	RESIDENTI	AL		
A5. Latitude/Longitude: Lat. 39 19' 42.5" Long. 74 29' 46.8" Horizo	ontal Datum:	C NAD 1927	NAD 1983	
A6. Attach at least 2 photographs of the building if the Certificate is being used	to obtain floo	od insurance.		
A7. Building Diagram Number 8				
A8. For a building with a crawlspace or enclosure(s):	A9. For a bui	lding with an attache	ed garage:	
		tage of attached ga		sq ft
b) Number of permanent flood openings in the 11. crawlspace or enclosure(s) within 1.0 foot above adjacent grade	in the attac	permanent flood op hed garage within 1 icent grade	.0 foot 2	
c) Total net area of flood openings in A8.b 2200. sq in	c) Total net a	rea of flood opening	s in A9.b 400	sq in
d) Eligineered libbd openinger to the second		d flood openings?	C Yes	No
SECTION B - FLOOD INSURANCE RATE		INFORMATION		3. State
B1. NFIP Community Name & Community Number B2. County MARGATE 345304 ATLANTIC				NJ
345304/0001 C Revised Da	to	8. Flood Zone(s) -8	B9. Base Floo (Zone AO, depth	d Elevation(s) use base flood
Oct 28, 1983			10.00'	
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood	depth entered	i in Item B9:		
C FIS Profile  FIRM C Community Determined C Other/Source:				
B11. Indicate elevation datum used for BFE in Item B9:				
B12. Is the building located in a Coastal Barrier Resources System (CBRS) are	ea or Otherwis	se Protected Area (C	OPA)? C·Ye	s (• No
Designation Date: CBRS COPA				
SECTION C - BUILDING ELEVATION INFOR			Ti-ished Cana	Invotion
C1. Building elevations are based on: C Construction Drawings* C Build	BEE) AR AF	NSTRUCTION (9)	Finished Cons A30, AR/AH,	
C2. Elevations - Zones A1 - A30, AE, AH, A (with BFE), VE, V1 - V30, V (with Complete Items C2.a -h below according to the building diagram specified in Ite	em A7. In Pue	erto Rico only, enter	meters.	
A new Elevation Certificate will be required when construction of the building	is complete.			
Benchmark Utilized: RM-2 Vert	ical Datum: N	GVD 1929		
Indicate elevation datum used for the elevations in items a) through h) below.	• NGVD 19	29 C NAVD 1988		
C Other/Source:				
Datum used for building elevations must be the same as that used for the BFE			Check the me	asurement used
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	9	- 40	( feet	Cimeters
b) Top of the next higher floor	13	- 40	( feet	Cmeters
a use of the level having the level of the level member (V/Zones only)	N/A	-	(e feet	C meters
<ul> <li>d) Attached garage (top of slab)</li> </ul>	9	- 43	(e feet	Cimeters
<ul> <li>e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)</li> </ul>	13	- 80	( feet	() meters
f) Lowest adjacent (finished) grade next to building (LAG)	8	- 90	( feet	C meters
<ul><li>g) Highest adjacent (finished) grade next to building (HAG)</li></ul>	9	- 34	( feet	Cmeters
<ul> <li>h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support</li> </ul>	8	- 90	( feet	( meters

# ELEVATION CERTIFICATE

110 SOUTH EXETER AVENUE	MARGATE		1	LP	08402
SECTION D	- SURVEYOR, ENGI	NEER, OR	ARCHITECT C	ERTIFICATION	
This certification is to be signed and sealed by that the information on this Certificate represen punishable by fine or imprisonment under 18 L	nts my best efforts to i	interpret the			
Check here if attachments.	Were latitude and provided by a licer	nsed land su			
Certifier's Name DANIEL J. PONZIO, SR.	1	License Nun GS37603	nber		
Title LAND SURVEYOR	Company Name ARTHUR W. PONZ	Company Name ARTHUR W. PONZIO CO. & ASSOC.INC			PLACE SEAL HERE
Address 100 N. DOVER AVENUE	City ATLANTIC CITY	State NJ	Zip Code 08401		
Signature	Date 6/8/16	Teleph +1 (6	one 609) 344-8194		
Copy both sides of this Elevation Certificate for	(1) community officia	I, (2) insura	nce agent/com	pany, and (3) build	ling owner.
PROJECT #32324 FIRST FLOOR ELEV =	10720	1 SMAF ANICALS =	RT VENT MOD 17.88'	EL #1540-510	
At-Dom	1				
		V NOT DE		ZONE AO AND Z	Date 6/8/16
SECTION E - BUILDING ELEVATION IN For Zones AO and A (without BFE), complete It					
Sections A, B,and C. For Items E1 -E4, use nat	ural grade, if available	e. Check the	measurement	used. In Puerto F	lico only, enter meters.
<ol> <li>Provide elevation information for the followin highest adjacent grade (HAG) and the lowest a) Top of bottom floor (including basement,</li> </ol>	st adjacent grade (LA				
or enclosure) is			C feet C	meters ab	ove or below the HAG.
<ul> <li>b) Top of bottom floor (including basement, or enclosure) is</li> </ul>	crawlspace,		C feet C	meters 🗌 abo	ove or Delow the LAG.
2. For Building Diagrams 6 -9 with permanent igher floor (elevation C2.b in the diagrams) of t		led in Sectio			8 -9 of Instructions), the next nove or below the HAG.
3. Attached garage (top of slab) is		·	C feet C	meters 🗌 abo	ove or is below the HAG.
<ol> <li>Top of platform of machinery and lor equipn ervicing the building is</li> </ol>	nent		C feet C	meters 🗌 abo	ve or 🗌 below the HAG.
5. Zone AO only: If no flood depth number is a nanagement ordinance? C.Yes C.No C	vailable, is the top of Unknown. The local				
SECTION F - PROPE	RTY OWNER (OR O	WNER'S RE	PRESENTAT	IVE) CERTIFICAT	ION
he property owner or owner's authorized repre ommunity-issued BFE) or Zone AO must sign h Id Represe					
L			State		ZIP Code
Signature	1		Telephon	е	
Comments					
					Check here if attachments,

Replaces all previous editions.

ELEVATION CERTIFICATE			OMB No. 1660-0008 Expiration Date: November 30, 2018			
IMPORTANT: In these spaces, copy the corr	esponding information	from Section A.	FOR INSURANCE COMPANY USE			
Building Street Address (including Apt., Unit, S 110 S. EXETER AVENUE	uite, and/or Bldg. No.) o	r P.O. Route and Box	No. Policy Number:			
City MARGATE	State New Jersey	ZIP Code 08402	Company NAIC Number			
SECTIO	ON G - COMMUNITY IN	FORMATION (OPTIC	DNAL)			
The local official who is authorized by law or or Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, en	Certificate. Complete th					
			gned and sealed by a licensed surveyor, icate the source and date of the elevation			
G2. A community official completed Section or Zone AO.	ion E for a building locat	ed in Zone A (without	a FEMA-issued or community-issued BFE)			
G3. The following information (Items G4–G10) is provided for community floodplain management purposes.						
G4. Permit Number	G5. Date Permit Issue	ed	G6. Date Certificate of Compliance/Occupancy Issued			
G7. This permit has been issued for:	New Construction	Substantial Improvem	lent			
G8. Elevation of as-built lowest floor (including of the building:	g basement)		feet meters			
G9. BFE or (in Zone AO) depth of flooding at	the building site:		☐ feet ☐ meters Datum			
G10. Community's design flood elevation:			feet meters			
Local Official's Name		Title CFM				
JIM GALANTINO						
Community Name CITY OF MARGATE		Telephone	74			
CITY OF MARGATE     609-822-1974       Signature     Date						
Comments (including/type of equipment and loc		12/16/2016				
Comments (including/type of equipment and loc	cation, per C2(e), if appl	icable)				
			Check here if attachments.			



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**

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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<sup>®</sup> 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*<sup>®</sup> (IBC)
- 2015, 2012, 2009 and 2006 International Residential Code<sup>®</sup> (IRC)
- 2013 Abu Dhabi International Building Code (ADIBC)<sup>†</sup>

 $^{\dagger} \text{The ADIBC}$  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<sup>®</sup> 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<sup>®</sup> 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,

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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<sup>®</sup> Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. The SmartVENT<sup>®</sup> Stacking Model #1540-511 and FloodVENT<sup>®</sup> 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<sup>®</sup> Model #1540-510 and SmartVENT<sup>®</sup> Overhead Door Model #1540-514 both have screen covers with <sup>1</sup>/<sub>4</sub>-inch-by-<sup>1</sup>/<sub>4</sub>-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm<sup>2</sup>) of net free area to supply natural ventilation. The SmartVENT<sup>®</sup> 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 FVs recognized in this report do not offer natural ventilation.

# 4.0 DESIGN AND INSTALLATION

SmartVENT<sup>®</sup> and FloodVENT<sup>®</sup> 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<sup>®</sup> 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 m<sup>2</sup>) of enclosed area, except that the SmartVENT<sup>®</sup> Stacking Model #1540-511 and FloodVENT<sup>®</sup> Stacking Model #1540-521 must be

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installed with a minimum of one FV for every 400 square feet  $(37.2 \text{ m}^2)$  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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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).

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.) COVERAGE		
FloodVENT <sup>®</sup>	1540-520	15 <sup>3</sup> /4" X 7 <sup>3</sup> /4"	200	
SmartVENT <sup>®</sup>	1540-510	15 <sup>3</sup> /4" X 7 <sup>3</sup> /4"	200	
FloodVENT <sup>®</sup> Overhead Door	1540-524	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200	
SmartVENT <sup>®</sup> Overhead Door	1540-514	15 <sup>3</sup> /4" X 7 <sup>3</sup> /4"	200	
Wood Wall FloodVENT <sup>®</sup>	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200	
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 <sup>3</sup> / <sub>4</sub> "	200	
SmartVENT <sup>®</sup> Stacker	1540-511	16" X 16"	400	
FloodVent <sup>®</sup> Stacker	1540-521	16" X 16"	400	

TABLE 1-MODEL SIZES

For SI: 1 inch = 25.4 mm; 1 square foot =  $m^2$ 

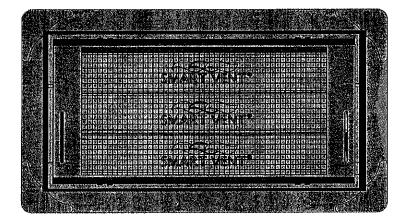


FIGURE 1-SMART VENT: MODEL 1540-510

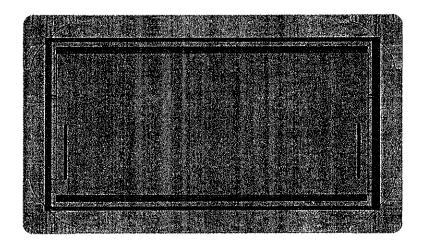


FIGURE 2-SMART VENT MODEL 1540-520

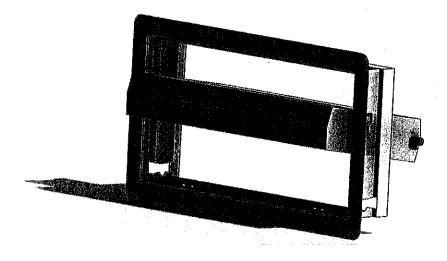


FIGURE 3-SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



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# **ICC-ES Evaluation Report**

# ESR-2074 CBC and CRC Supplement

Issued 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 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent<sup>®</sup> Automatic Foundation Flood Vents, recognized in ICC-ES master evaluation report ESR-2074, have also been evaluated for compliance with codes noted below.

#### Applicable code edition:

- 2016 California Building Code (CBC)
- 2016 California Residential Code (CRC)

#### 2.0 CONCLUSIONS

#### 2.1 CBC:

The Smart Vent<sup>®</sup> Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2074, comply with 2016 CBC Chapter 12, provided the design and installation are in accordance with the 2015 *International Building Code*<sup>®</sup> (IBC) provisions noted in the master report and the additional requirements of CBC Chapters 12, 16 and 16A, as applicable.

The products recognized in this supplement have not been evaluated under CBC Chapter 7A for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area.

#### 2.2 CRC:

The Smart Vent<sup>®</sup> Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2074, comply with the 2016 CRC, provided the design and installation are in accordance with the 2015 *International Residential Code*<sup>®</sup> (IRC) provisions noted in the master report.

The products recognized in this supplement have not been evaluated under 2016 CRC Chapter R337, for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area.

The products recognized in this supplement have not been evaluated for compliance with the International Wildland–Urban Interface Code<sup>®</sup>.

This supplement expires concurrently with the master report, reissued February 2017 and revised November 2017.

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# **ICC-ES Evaluation Report**

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# ESR-2074 FBC Supplement

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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<sup>®</sup> AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514

#### 1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent<sup>®</sup> Automatic Foundation Flood Vents, recognized in ICC-ES master report ESR-2074, have also been evaluated for compliance with the codes noted below.

#### Applicable code editions:

- 2017 Florida Building Code—Building
- 2017 Florida Building Code—Residential

## 2.0 CONCLUSIONS

The Smart Vent<sup>®</sup> Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2074, comply with the *Florida Building Code—Building* and the FRC, provided the design and installation are in accordance with the 2015 *International Building Code*<sup>®</sup> provisions noted in the master report.

Use of the Smart Vent<sup>®</sup> Automatic Foundation Flood Vents has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and the *Florida Building Code—Residential*.

For products falling under Florida Rule 9N-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the master report, reissued February 2017 and revised November 2017.

