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

# ELEVATION CERTIFICATE 406382 OMB No. 1660-0008 Expires March 31, 2012

National Flood Insurance Program

Important: Read the instructions on pages 1-9.0311-01900

SECTION A - PROPERTY INFORMATION						For Insurance Company Use.
. Building Owner's Name GREGORY T. GIRGENTI & JAMIE R. GIRGENTI  A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.						Policy Number
A2. Building Street Address 107 HARBOR DRIVE	ss (including Apt., L	Jnit, Suite, and/or Bi	dg. No.) or P.(	D. Route and Box I	No.	Company NAIC Number
City BELLEAIR BEA		ZIP Code 33786				······································
A3. Property Description ( LOT 5, BLOCK A, UNIT C	Lot and Block Num BELLEAIR BEACH	ibers, Tax Parcel Nu I SUBDIVISION, PL	mber, Legal D AT BOOK 25,	escription, etc.) PAGES 3 & 4		
A4. Building Use (e.g., Re A5. Latitude/Longitude: La A6. Attach at least 2 photo A7. Building Diagram Num A8. For a building with a c a) Square footage of b) No. of permanent enclosure(s) withir c) Total net area of fi	at. 27°54'38"N Lon ographs of the build nber <u>8</u> crawlspace or enclose crawlspace or encl flood openings in the 1.0 foot above adj lood openings in A8	ng. 82°50'39"W  ling if the Certificate sure(s): losure(s) 2 ne crawlspace or jacent grade 1		to obtain flood insu A9. For a a) S( b) N( wi c) To	building with an attac quare footage of attac o. of permanent flood thin 1.0 foot above ac	hed garage: hed garage <u>1124</u> sq ft openings in the attached garage ljacent grade <u>6</u> openings in A9.b 1200 sq in
	<u> </u>		SURANCE		M) INFORMATION	<del>-</del>
D4 NCD O 5 N						
B1. NFIP Community Name CITY OF BELLEAIR BEAC	B & Community Nur H 125089		32. County Nat PINELLAS CO		l i	B3. State FLORIDA
B4. Map/Panel Number 12103C0111	B5. Suffix G	B6. FIRM Index Date 8-18-2009	Effective	FIRM Panel e/Revised Date -3-2003	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
Designation Date N/A	•		☐ CBRS	☐ OPA		
C1. Building elevations are in *A new Elevation Certific C2. Elevations – Zones A1-	based on:	Construction Draw d when construction th BFE), VE, V1-V30	vings* of the building ), V (with BFE)	☐ Building Under is complete.	E. AR/A1-A30   AR/AH	ED)  ☑ Finished Construction , AR/AO. Complete Items C2.a-h
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IMPGRTANT: In these so	aces, copy the corresponding in	oformation from Section A		I Facility of the second
Building Street Address (include	ling Apt., Unit, Suite, and/or Bldg. No.)	or P.O. Route and Box No.		For Insurance Company Use. Policy Number
107 HARBOR DRIVE				
City BELLEAIR BEACH Stat	e FL ZIP Code 33786			Company NAIC Number
SE	CTION D - SURVEYOR, ENGINE	ER, OR ARCHITECT CERT	IFICATION (CON	TINUED)
Copy both sides of this Elevation	on Certificate for (1) community official	, (2) insurance agent/company,	and (3) building owr	ner.
Comments JOB#11-317FNL	Ŋ			
Dalas				
Signature		Date 6-19-2012		
SECTION F - BUILDING	G ELEVATION INFORMATION (S	HDVEV NOT DECUMEN	OR 70NE 40 4	Check here if attachments
and C. For items E1-E4, use r	BFE), complete Items E1-E5. If the Ce natural grade, if available. Check the n	neasurement used. In Puerto R	ico only, enter mete	rs.
grade (ring) and the low	ation for the following and check the ap est adjacent grade (LAG).		er the elevation is at	ove or below the highest adjacent
<ul> <li>a) Top of bottom floor (inc</li> </ul>	cluding basement, crawlspace, or encl		: 🔲 meters 🔲 abo	ove or 🗌 below the HAG.
E2. For Building Diagrams 6-	cluding basement, crawlspace, or encl 9 with permanent flood openings provi	osure) is <u>N/A.</u> feet	meters abo	ive or below the LAG.
(elevation C2.b in the dia	grams) of the building is N/A.	☐ feet ☐ meters ☐ above	or   below the HA	G.
E3. Attached garage (top of s		eters above or below the	e HAG.	
E5. Zone AO only: If no floor	nery and/or equipment servicing the bu	of the hottom floor elevated in a	meters   above	or Li below the HAG.
ordinance?  Yes	No Unknown. The local official r	must certify this information in S	ection G.	community's noodplain management
SE	CTION F - PROPERTY OWNER (	OR OWNER'S REPRESEN	TATIVE) CERTIFI	CATION
of Zone AO must sign here. Th	authorized representative who complete statements in Sections A, B, and E a	tes Sections A, B, and E for Zor are correct to the best of my kno	ne A (without a FEM wledge.	A-issued or community-issued BFE)
perty Owner's or Owner's A	uthorized Representative's Name			
Address		City	State	ZIP Code
Signature		Date	Telephon	e
Comments				
				Check here if attachment
"h- 91	SECTION G - COMM	IUNITY INFORMATION (OF	TIONAL)	
ind G of this Elevation Certificate	d by law or ordinance to administer the Complete the applicable item(s) and	e community's floodplain manag I sign below. Check the measur	ement ordinance ca	n complete Sections A, B, C (or E),
31. The information in Sect	ion C was taken from other documenta certify elevation information. (Indicate	ation that has been signed and	sealed by a licensor	SUBJEVOT Spraincer or grabitort who
32. A community official co	mpleted Section E for a building locate	d in Zone A (without a FEMA-is	sued or community-	issued BFE) or Zone AO.
33. The following information	on (Items G4-G9) is provided for comm	nunity floodplain management p	urposes.	
G4. Permit Number	G5. Date Permit Issued	G6. Date 0	Certificate Of Compli	ance/Occupancy Issued
G7. This permit has been issued	I have Comptent to			
	I for:	Substantial Improvement		
69. BFE or (in Zone AO) depth		•	meters (PR) Datum meters (PR) Datum	
G10. Community's design flood e			meters (PR) Datum	
Local Official's Name		Title		
Community Name		Telephone		
nature		Date		
Comments	****			
				Check here if attachments



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ESR-2074

Reissued 02/2015 This report is subject to renewal 02/2017.

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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

#### **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

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

<sup>†</sup>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, 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® Model #1540-510 and SmartVENT® Overhead Door Model #1540-514 both have screen covers with ¼-inch-by-¼-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 square feet (37.2 m²) 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® 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® 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 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT®	1540-510	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	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® Overhead Door	1540-514	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT®	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® Stacker	1540-521	16" X 16"	400

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

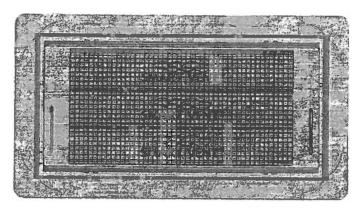


FIGURE 1-SMART VENT: MODEL 1540-510

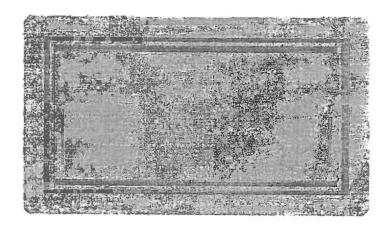


FIGURE 2-SMART VENT MODEL 1540-520

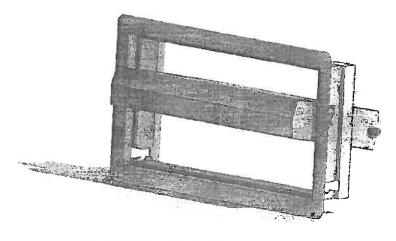


FIGURE 3-SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN



# **ICC-ES Evaluation Report**

# **ESR-2074 FBC Supplement**

Reissued February 2015 Revised March 2016 This report is subject to renewal February 2017.

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DIVISION: 08 00 00-OPENINGS

Section: 08 95 43-Vents/Foundation Flood Vents

#### REPORT HOLDER:

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#### **EVALUATION SUBJECT:**

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1548-520; #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® 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:

- 2014 Florida Bullding Code—Bullding (FBC)
- 2014 Florida Building Code—Residential (FRC)

## 2.0 CONCLUSIONS

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2074, comply with the FBC and the FRC, provided the design and installation are in accordance with the *International Building Code®* 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 FBC and the FRC.

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, relssued February 2015 and revised May 2016.

