# 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

Name and Administration of the Control of the Contr										
			TION A - P	ROPERTY IN	FORMA	TION	FOR IN	SURANCE COMPANY USE		
A1. Building Owner's Na	me Faircloth Hor	nes					Policy N	lumber:		
A2. Building Street Addr 6 Wyndy Court	Compar	ny NAIC Number:								
City Pooler			State	e GA ZIP	Code 31	322	***************************************			
A3. Property Description Lot 422 Forest Lakes Sub					etc.)					
c) Total net area of	at. 32,0836 Lon tographs of the bumber 18 crawlspace or enforament flood opening in 1.0 foot about flood openings in	g. <u>81.1629</u> Houlding if the Certification of the C	orizontal Datu ate is being us N/A sq	m: NAD 19 sed to obtain flo A9.	For a bu a) Squa b) Num withi c) Tota	nce.  ilding with an atta are footage of att ber of permanen n 1.0 foot above I net area of flood	ached gar t flood ope adjacent o d openings	rage <u>463</u> sq ft enings in the attached garage grade <u>4</u> s in A9.b <u>992</u> sq in		
d) Engineered flood		Yes No				neered flood ope		⊠ Yes □ No		
	SEC	TION B - FLOOD	INSURANC	E RATE MA	P (FIRM	) INFORMATIO	ON			
B1. NFIP Community Nan City of Pooler & 130261	B1. NFIP Community Name & Community Number City of Pooler & 130261  B2. County Name Chatham							B3. State GA		
B4. Map/Panel Number 13051C/0019	B5. Suffix H	B6. FIRM Index 1 7/7/2014		B7. FIRM Pane ective/Revised 7/7/2014		B8. Flood Zone(s) AE		Base Flood Elevation(s) (Zone AO, use base flood depth) 20.00		
B11. Indicate elevation dat B12. Is the building located Designation Date:	in a Coastal Bar		VD 1929	Other/Si NAVD 1 rea or Otherwis	988 C	Other/Source: ed Area (OPA)?		☐ Yes		
SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)										
C1. Building elevations are  "A new Elevation Certifications — Zones A1 below according to the  Benchmark Utilized: CI indicate elevation datu  Datum used for building."	icate will be requi -A30, AE, AH, A building diagram K0351 m used for the ele	(with BFE), VE, V1- specified in Item A7 evations in items a) t	on of the build V30, V (with I In Puerto Ri Vertical D through h) bei	ding is complete BFE), AR, AR/A co only, enter n atum: 1988 low.   NGVD	e. A, AR/AE, meters.		AH, AR/A			
Data in used for building	g Giovations must	toe the same as tha	t used for the	DFE.		Check	k the mean	surement used.		
a) 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  21.95  N/A							<ul> <li>☐ feet</li> <li>☐ feet</li> <li>☐ feet</li> <li>☐ feet</li> <li>☐ feet</li> </ul>	meters meters meters meters meters meters meters		
(Describe type of equipment and location in Comments)  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  18.20							⊠ feet ⊠ feet ⊠ feet	☐ meters ☐ meters ☐ meters		
	SECTIO	N D - SURVEYO	R, ENGINE	ER, OR ARC	HITECT	CERTIFICATION	ON			
This certification is to be si information. I certify that th I understand that any false Check here if commer Check here if attachm  Certifier's Name Ken Nutt  Title Land Surveyor	gned and sealed e information on t statement may b nts are provided o	by a land surveyor, this Certificate repre- ee punishable by fine on back of form.	engineer, or a sents my besi or imprisonm Were latitud licensed land	architect authori t efforts to inter- nent under 18 C e and longitude d surveyor? License Nu	pret the d J.S. Code e in Sectio	w to certify elevate at a available. Section 1001. n A provided by a	tion	GEORGIA GEORGIA AGUSTERA No 2104		
Address 1065 Sandtown I	Pond	Company Name	Perimeter Sur			1 80807	/\	TO NO SURVEY SE		
Signature Signature	III	City Marietta,  Date 1/4/2016		State GA Telephone		de 30008 -5850	4x	WETH L.		
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**ELEVATION CERTIFICATE, page 2** IMPORTANT: In these spaces, copy the corresponding information from Section A. FOR INSURANCE COMPANY USE Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No Policy Number: 6 Wyndy Court City Pooler State GA ZIP Code 31322 Company NAIC Number: SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED) Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner. Comments Machinery servicing building is an air/heat unit. This unit is located on the right side of the building. Signature Date 1/4/2016 SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE) For Zones AO and A (without BFE), complete Items E1-E5. If the Certificate 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 measurement used. In Puerto Rico only, enter meters. E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG). a) Top of bottom floor (including basement, crawlspace, or enclosure) is \_\_\_ ☐ feet ☐ meters ☐ above or ☐ below the HAG. ☐ feet ☐ meters ☐ above or ☐ below the LAG. b) Top of bottom floor (including basement, crawlspace, or enclosure) is E2. For Building Diagrams 6-9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8-9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is ☐ feet ☐ meters ☐ above or ☐ below the HAG. ☐ feet ☐ meters ☐ above or ☐ below the HAG. E3. Attached garage (top of slab) is E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_ \_ ☐ feet ☐ meters ☐ above or ☐ below the HAG. E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? Yes No Unknown. The local official must certify this information in Section G. SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge. Property Owner's or Owner's Authorized Representative's Name Address City State ZIP Code Signature Date Telephone Comments ☐ Check here if attachments. SECTION G - COMMUNITY INFORMATION (OPTIONAL) The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8-G10. In Puerto Rico only, enter meters The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.) A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO. The following information (Items G4-G10) is provided for community floodplain management purposes. G5. Date Permit Issued G6. Date Certificate Of Compliance/Occupancy Issued

G7. This permit has been issued for: New Construction	Substantial Improv	vement			
G8. Elevation of as-built lowest floor (including basement) of the building	:	feet [	☐ meters	Datum	
G9. BFE or (in Zone AO) depth of flooding at the building site:		☐ feet	☐ meters	Datum	
G10. Community's design flood elevation:		☐ feet	☐ meters	Datum	SOCIO PER CONTROL DE C
Local Official's Name	Title	-			
Community Narrie	Teleph	ione	***		
Signature	Date				
Comments					
	-				☐ Check here if attachments.

FEMA Form 086-0-33 (7/12)

Replaces all previous editions.

## **ELEVATION CERTIFICATE**, page 3

# Building Photographs See Instructions for Item A6.

## IMPORTANT: In these spaces, copy the corresponding information from Section A.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.

FOR INSURANCE COMPANY USE

Policy Number:

City Pooler

ZIP Code 31322

Company NAIC Number:

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 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." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.



Photo taken on: 12/30/2015





# **ELEVATION CERTIFICATE**, page 4

# Building Photographs Continuation Page

IMPORTANT: In these spaces, copy the corresponding information from Section A. FOR INSURANCE COMPANY USE Building Street Address (including Apt., Unit, Suite, and/or Bidg. No.) or P.O. Route and Box No. 6 Wyndy Court Policy Number: City Pooler State GA ZIP Code 31322 Company NAIC Number:

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.

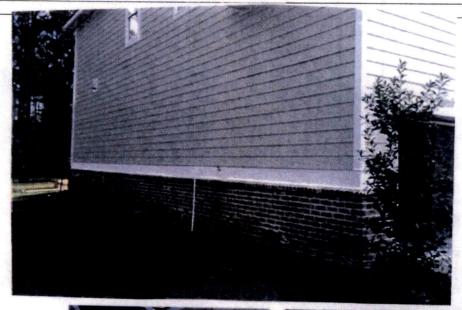


Photo taken on: 12/30/2015

Photo taken on: 12/30/2015





# **MATERIAL REVIEW & MAINTENANCE INSTRUCTIONS**

#### Objective

When we set out to design our flood vent products, a comprehensive study was conducted to determine the most important design attributes that would be needed to insure that our customers received the best product available. Because our company started on the shores of the East Coast of New Jersey, everyone placed durability as their number one concern.

#### **Durability:**

After extensive research, including review of many less expensive materials, we choose to make the bulk of the components for our vents from stainless steel. Salt will pit stainless steel unless it is rinsed with water. We recommend that the vent be washed with fresh water twice a year. Any red rust or minor surface pitting can be removed with "commercial de-rusting solutions."

The mechanism that operates the automatic louvers on models 1540-510, 1540-511, 1540-514 and 1540-550 is also entirely made from stainless steel, and water rinsing will reduce corrosion and dirt build-up. Prior to final inspection and testing, the louver mechanism is lubricated with a dry film lubricant. This over the counter lubricant should be applied at minimum one time per year, or when needed. Rinse the louver mechanism, let dry, then spray all of the moving parts. Note: Wet lubricants or grease will allow dirt and sand to accumulate on the moving parts. Use only dry film lubricants.

The bi-metal coil is made from highly engineered materials. The composite contains a large portion of Nickel and the finished coil is secondarily heat-treated, which forms a protective barrier to protect it from the elements. A squirt of dry film lubricant into the coil chamber during maintenance will extend its life.

The floats are manufactured from engineered plastics. An ultra-violet inhibitor was blended into the raw material before molding to insure that the sun does not degrade the functional or dimensional characteristics of the material. Insert a thin blade or a credit card into each side of the vent door's float slot, and the door will easily push open. Rinse the float cavity, then apply a small amount of dry film lubricant on the float, where it contacts the frame.

Like any product, the care one gives will determine its life. We have used the best American materials, along with the best engineering and manufacturing professionals to build our products. With just a little care, your vents will function carefree for many years.





Most Widely Accepted and Trusted

# **ICC-ES Evaluation Report**

# **ESR-2074 FBC Supplement**

Issued July 1, 2013

This report is subject to renewal February 1, 2015.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

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: 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 #1540-514

## 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:

- 2010 Florida Building Code—Building (FBC)
- 2010 Florida Building Code—Residential (FRC)

#### 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 FBC and the FRC, provided the design and installation are in accordance with the *International Building Code*<sup>®</sup> provisions noted in the master report.

Use of the Smart Vent® 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 structures not subject to FBC Section 2326.3.1 or FRC Section 4409.13.3.1, as applicable.

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 December 1, 2012, revised July 2013.





# **ICC-ES Evaluation Report**

ESR-2074\*

Reissued December 1, 2012 This report is subject to renewal February 1, 2015.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

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: 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 #1540-524; FLOODVENT™ OVERHEAD DOOR MODEL #1540-524; SMARTVENT™ OVERHEAD DOOR MODEL #1540-514

#### 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2009 and 2006 International Building Code® (IBC)
- 2009 and 2006 International Residential Code® (IRC)

#### Properties evaluated:

- Physical operation
- Water flow

#### **2.0 USES**

The Smart Vent<sup>®</sup> 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. The Smart Vent<sup>®</sup> units are intended for use where flood hazard areas have been established in accordance with IBC Section 1612.3 or IRC Section R3222.1. 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. 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 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 15³¼ inches wide by 7³¼ 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 8³¼ inches high (355.6 by 222.25 mm). The SmartVENT™ 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

\*Revised July 2013



concrete walls up to 12 inches (305 mm) thick. In order to comply with the engineered opening design principle noted in Section 2.6.2.2 of ASCE/SEI 24, the Smart Vent® AFFVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one AFFV 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 AFFV for every 400 square feet (37.2 m²) of enclosed area.
- Below the base flood elevation.
- With the bottom of the AFFV located a maximum of 12 inches (305.4 mm) above grade.

## 5.0 CONDITIONS OF USE

The Smart Vent® AFFVs 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® AFFVs 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> AFFVs 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 Automatic Foundation Flood Vents (AC364), dated October 2007.

## 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).