# 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

	•		otions on pag	00 1 0.		ouly 51, 2015
A1. Building Owner's Name TO	M & DONNA RYAN	ECTION A - PROP	RTY INFORMA	TION	FOR INSURANCE	COMPANY USE
					Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 491 HARTLEY STREET					Company NAIC Nun	nber:
City MARCO ISLAND		State FL	ZIP Code 34	145		
A3. Property Description (Lot and LOT 2, BLOCK 258, MARCO BE	l Block Numbers, Tax Par ACH UNIT SIX	cel Number, Legal Desc	cription, etc.)			
A4. Building Use (e.g., Residentia	al, Non-Residential, Addition	on, Accessory etc.) RF	SIDENTIAL	-		
A5. Latitude/Longitude: Lat. 25° 5	6' 58.53"N Long. 81° 43'	24.39"W		Horizontal Datum	: NAD 1927 🛛	NAD 1983
A6. Attach at least 2 photographs A7. Building Diagram Number 1-	of the building if the Certi	ficate is being used to o	btain flood insurar	nce.		
A8. For a building with a crawlspa	ce or enclosure(s):		A9. For a bui	lding with an attac	hed garage:	
<ul><li>a) Square footage of crawlsp</li><li>b) Number of permanent floo</li></ul>	ace or enclosure(s) d openings in the crawlen	N/A sq ft	a) Squa	re footage of attac	ched garage 44	<u>7</u> sq ft
or enclosure(s) within 1.0	oot above adjacent grade	N/A	D) Numb within	per of permanent f 1.0 foot above ac	lood openings in the adjacent grade 3	attached garage
<ul> <li>c) Total net area of flood ope</li> <li>d) Engineered flood openings</li> </ul>	nings in A8.b s? ☐ Yes ☐ No	N/A sq in	c) Total	net area of flood of	ppenings in A9.b 60	<u>0</u> sq in
	SECTION B – FLOO			eered flood openi		□ No
B1. NFIP Community Name & Com			IE WAP (FIRW)			·
CITY OF MARCO I 120		B2. County Name COLLIER			33. State FLORIDA	
	Suffix B6. FIRM Index		M Panei	B8. Flood	B9. Base Flood Ele	evation(s) (Zone
12021 C 0020	5/16/2012		evised Date 2012	Zone(s) AE	AO, use base 1	flood depth)
310. Indicate the source of the Base	Flood Elevation (BFE) da				+0.0	,
☐ FIS Profile ☐ FIF	RM   Community D	etermined 🔲 C	ther/Source:	_		
311. Indicate elevation datum used	or BFE in Item B9: N	GVD 1929 🛛 N	AVD 1988 🔲	Other/Source:		
312. Is the building located in a Coal Designation Date:	stal Barrier Resources Sys	stem (CBRS) area or O	therwise Protected	Area (OPA)?	☐ Yes ☑	☑ No
	ECTION C. PUN DING		□ OPA			
	ECTION C - BUILDING		RMATION (SUR	RVEY REQUIRE	D)	
21. Building elevations are based on *A new Elevation Certificate will be	Construction [	Drawings*	Building Under Co	nstruction*		iction
<ol><li>Elevations – Zones A1–A30, AE.</li></ol>	AH, A (with BFF) VF, V1.	-V/30 V (with REE) AD	ADIA ADIAE AL	R/A1-A30 AR/AH	LAR/AO Complete II	tems C2 a h
below according to the building d Benchmark Utilized: SITE	lagram specified in Item A	7. In r derio raco orny, i	enter meters.		, ra or to. Complete it	ems 02.a-n
Indicate elevation datum used for	the elevations in items a)	Vertical Datum: No.	AVD 88 IGVD 1929 🖾 NA	VD 1000 T Other		
Datum used for building elevation	s must be the same as the	at used for the BFE.	13 VD 1929 12 NA	1988 LI Otne	er/Source:	
a) Top of bottom floor (including b	assement organisment			Check the	e measurement used	•
b) Top of the next higher floor	asement, crawispace, or e	enclosure floor)	9. <u>0</u>		feet meters	
c) Bottom of the lowest horizontal	es only)	<u>N./A</u> <u>N./A</u>		feet meters		
<ul> <li>d) Attached garage (top of slab)</li> </ul>	5,0	<u>7.2</u>		feet meters		
<ul> <li>e) Lowest elevation of machinery (Describe type of equipment an</li> </ul>	or equipment servicing the	building	<u>9.0</u>	$\boxtimes$	feet meters	(a)
<li>f) Lowest adjacent (finished) grad</li>	e next to building (LAG)		<u>7.1</u>		feet	
g) Highest adjacent (finished) grad		7.7		feet  meters		
h) Lowest adjacent grade at lowes	t elevation of deck or stair	s, including structural s	upport <u>N./A</u>		feet  meters	
SE	CTION D - SURVEYO	R, ENGINEER, OR	ARCHITECT CE	RTIFICATION	and the state of t	
his certification is to be signed and so formation. I certify that the information understand that any false statement						17.3.
understand that any false statement.  Check here if comments are prov	may be purishable by fine	or imprisonment under	'18 U.S. Code, Se	ction 1001. 🔏		
Check here if attachments.	ided on back of form.	Were latitude and long licensed land surveyor	itude in Section A ? Xes		JU 200	
ertifier's Name ANTONIO TRIGO	(13.0135)	-		□ No	PLSMO	24.
itle LAND SURVEYOR		A. TRIGO & ASSOCIAT	e Number PLS 29	982	1 P	2502
ddress 2223 TRADE CENTER WAY		State		1, 0		3
ignature	Date 3/5/2014		one 239-594-844		AF 3	1214
		- Telephi	203-034-044	10	- Marian	
MA Form 086-0-33 (7/12)	Se	e reverse side for co	ntinuction		Poplace	

	opy the corresponding information fro	m Section A	FOI	R INSURANCE COMPANY USE			
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.				cy Number:			
491 HARTLEY STREET							
City NAPLES	State FL	ZIP Code 34145	Con	npany NAIC Number:			
SECTION	D – SURVEYOR, ENGINEER, OR ARCH	IITECT CERTIFIC	ATION (CONT	INUED)			
Copy both sides of this Elevation Certification	cate for (1) community official, (2) insurance a	gent/company, and (	3) building owne	ſ.			
Comments A9b= SMART VENTS MO	DEL # 1540-520 C2e= HOT WATER HEATER	R IN GARAGE					
8:	The second secon						
Signature	Date	3/5/2014					
SECTION E - BUILDING ELEV	ATION INFORMATION (SURVEY NOT I	REQUIRED) FOR	ZONE AO ANI	ZONE A (WITHOUT BFE)			
For Zones AO and A (without BEE) cor	malete Items E4 E5 If the Contiferate is intend	-11	A - 10MD 5				
and C. for Items E1–E4, use natural gr	nplete Items E1–E5. If the Certificate is intendented ade, if available. Check the measurement used	ed to support a LOM. d. In Puerto Rico onl	A or LOMR-F red v, enter meters.	juest, complete Sections A, B,			
E1. Provide elevation information for the	he following and check the appropriate boxes to			e or below the highest adjacent			
grade (HAG) and the lowest adjac	ent grade (LAG). asement, crawlspace, or enclosure) is	□ feet □	☐ meters ☐ abo	ove or Delow the HAG.			
<li>b) Top of bottom floor (including base)</li>	asement, crawlspace, or enclosure) is	feet [	meters abo	ove or Delow the LAG.			
E2. For Building Diagrams 6–9 with pe	rmanent flood openings provided in Section A f the building is feet ☐ m	Items 8 and/or 9 (se	e pages 8–9 of li	nstructions), the next higher floor			
E3. Attached garage (top of slab) is _	leet  meters abov	e or	HAG.	G.			
E5. Zone AO only: If no flood depth nu	umber is available, is the top of the bottom floo	r elevated in accorda	ance with the con	nmunity's floodplain managemen			
	Unknown. The local official must certify this in						
	- PROPERTY OWNER (OR OWNER'S	100					
or Zone AO must sign here. The stateme	d representative who completes Sections A, B nts in Sections A, B, and E are correct to the b	and E for Zone A (west of my knowledge	vithout a FEMA-is e.	ssued or community-issued BFE)			
Property Owner's or Owner's Authorized	Representative's Name						
Address	City		State	ZIP Code			
ignature	Date		Telephone				
Comments							
			***************************************	Check here if attachmen			
	SECTION G - COMMUNITY INFORI	MATION (OPTION	AL)				
e local official who is authorized by law or his Elevation Certificate. Complete the an	ordinance to administer the community's floodp plicable item(s) and sign below. Check the mea	lain management ord	linance can comp	elete Sections A, B, C (or E), and (			
	taken from other documentation that has been						
is authorized by law to certify elev	vation information. (Indicate the source and da	ate of the elevation d	ata in the Comm	ents area below.)			
	ection E for a building located in Zone A (with			ed BFE) or Zone AO.			
	G4–G10) is provided for community floodplain	management purpos	ses.				
4. Permit Number 5 F 13 - 3 9 2 8	5. Date Permit Issued	G6. Date Certifica	ite Of Complianc	e/Occupancy Issued			
This permit has been issued for:	☐ New Construction ☐ Substantial Imp	rovement					
	ding basement) of the building:	☐ feet ☐ me	eters Datur	n			
BFE or (in Zone AO) depth of flooding		☐ feet ☐ me	eters Datur	n			
BFE or (in Zone AO) depth of flooding		☐ feet ☐ me		n			
BFE or (in Zone AO) depth of flooding  D. Community's design flood elevation:  Description of the second of the se	at the building site:	☐ feet ☐ me					
BFE or (in Zone AO) depth of flooding  D. Community's design flood elevation:  CAL Official's Name  CHRISTOPHE	at the building site:  R SPARACINO, CFM  Title	☐ feet ☐ me					
BFE or (in Zone AO) depth of flooding  D. Community's design flood elevation:  Cal Official's Name  CHRISTOPHE  Community Name	at the building site:  R SPARACINO, CFM  Title	FLANNER					
Elevation of as-built lowest floor (included BFE or (in Zone AO) depth of flooding D. Community's design flood elevation:  Decal Official's Name  CHRISTOPHE  Dommunity Name  Gnature  C. Spanners	at the building site:  R SPARACINO, CFM  Title	FLANNER					

## **Building Photographs**

See Instructions for Item A6.

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. 491 HARTLEY STREET

City MARCO ISLAND

State FL

ZIP Code 34145

Company NAIC Number:

Policy 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.





FRONT VIEW 3/5/2014

3 VENTS



REAR VIEW 3/5/2014



### **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 00—Vents

REPORT HOLDER:

SMARTVENT PRODUCTS, INC. 450 ANDBRO DRIVE, SUITE 2B PITMAN, NEW JERSEY 08071 (856) 307-1468 www.smartvent.com eval@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; 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® 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® 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, and each opening provides 76 square inches (49 032 mm²) of net free area for flood mitigation in the open position. The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units each contain two vertically arranged openings per unit, providing 152 square inches (98 064 mm²) of net free area for flood mitigation in the open position.

#### 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 15³/₄ inches wide by 7³/₄ 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 8³/₄ 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<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. The mounting straps allow mounting in wood, masonry and 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).