U.S. DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY National Flood Insurance Program

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ELEVATION CERTIFICATE

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IMPORTANT: Follow the instructions on pages 1-9.

OMB No. 1660-0008 Expiration Date: July 31, 2015

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SECTION	- PROPERTY INFORMATION	FOR INSURANCE COMPANY USE
A1. Building Owner's Name Timothy Helline		Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Blo 6336 Laguna Drive File # 14010132	dg. No.) or P.O. Route and Box No.	Company NAIC Number:
City Longboat Kev	State FL	ZIP Code 34228
A3. Property Description (Lot and Block Numbers, Tax Parcel Num Property ID# 7840200909	ber, Legal Description, etc.)	
A4. Building Use (e.g., Residential, Non-Residential, Addition, Acc	essory, etc.) Residential	Datum: VINAD 1927
A6. Attach at least 2 photographs of the building if the Certificate	is being used to obtain flood insurance.	
A7. Building Diagram Number		
 A8. For a building with a crawlspace or enclosure(s): a) Square footage of crawlspace or enclosure(s) 	1.295 sq ft a) Square footage of	attached garage:
b) Number of permanent flood openings in the crawlspace	b) Number of perman	ent flood openings in the attached garage
 or enclosure(s) within 1.0 foot above adjacent grade c) Total net area of flood openings in A8.b 	400 sq in c) Total net area of fit	nod openings in A9 b N/A so in
 d) Engineered flood openings?	d) Engineered flood of	penings? Yes Yes
SECTION B - FLOOD INS	URANCE RATE MAP (FIRM) INFORMAT	ION
B1. NFIP Community Name & Community Number	B2. County Name	B3. State
Town of Longboat Key 12081C	Manatee B7 FIRM Panel Effective / B8 Flood Zone	FL (s) B9 Base Flood Elevation(s) (Zone
	Revised Date	AO, use base flood depth)
12081C 0291 E 03/17/2014	U3/1//2014 AE	9
☐ FIS Profile	Other/Source:	
B11. Indicate elevation datum used for BFE in Item B9:	/D 1929 🛛 NAVD 1988 🗌 Other/Sour	ce:
B12. Is the building located in a Coastal Barrier Resources System	(CBRS) area or Otherwise Protected Area (OPA)	? 🗌 Yes 🛛 No
Designation Date: / / CBRS		
SECTION C – BUILDING EL	EVATION INFORMATION (SURVEY REQU	IIRED)
C1. Building elevations are based on: Construction Drawi *A new Elevation Certificate will be required when construction	ngs* Building Under Construction* n of the building is complete.	Finished Construction
C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, C2.a–h below according to the building diagram specified in It and the building diagram specified in It	V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR, em A7. In Puerto Rico only, enter meters.	/AH, AR/AO. Complete Items
Benchmark Utilized: FDEP MOD. 13-84-610	Vertical Datum: NAVD 1988	1
Indicate elevation datum used for the elevations in items a) the Datum used for building elevations must be the same as that	used for the BFE. Check the	8 Other/Source: measurement used.
a) Top of bottom floor (including basement, crawlspace, or en	closure floor) $\frac{5}{14}$. $\frac{2}{9}$	et 🗌 meters
 b) Top of the next higher floor c) Bettern of the lowest herizontal structural member () Zana 	$-\frac{14}{2}$, $\frac{7}{2}$ \times fe	et meters
 d) Attached garage (top of slab) 	X X te	et meters
 e) Lowest elevation of machinery or equipment servicing the to (Describe type of equipment and location in Comments) 	building A/c Bree	
f) Lowest adjacent (finished) grade next to building (LAG)	4. <u>8</u> ⊠ fe	et meters IUN 1 o 2015
 g) Highest adjacent (finished) grade next to building (HAG) b) Lowest adjacent grade at lowest elevation of dealers at lowest 	<u></u> <u></u> <u></u> <u></u> <u></u>	et meters 3 2013
structural support	, including X te	Planning Zaning
SECTION D - SURVEYOR	ENGINEER OR ARCHITECT CERTIFICA	TION
This certification is to be signed and sealed by a land surveyor, engin	neer, or architect authorized by law to certify elev	ration
nformation. I certify that the information on this Certificate represent	s my best efforts to interpret the data available.	().9
Check here if comments are provided on back of form. Were	latitude and longitude in Section A provided by	
Check here if attachments.	sed land surveyor? X Yes No	
Certifier's Name Robert O. Drake	License Number	PLACE
Title Com	pany Name	
Address Red	Stake Surveyors, Inc.	
7123 Proctor Road	asota FL 34241	A CONSTRUCTION OF THE
Jigracure Loc un (). Under Date 06/1	6/2015 Telephone (941) 923-9997	NO. 55RE
EMA Form ()86-0-33 (Revised 7/12)		CONTENS IN
See 10	everse side for continuation.	Replaces all previous editions.
		The AL VEVER 200 Manut
		Start Transference

ELEVATION CERTIFICATE, page 2

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IMPORTANT: In these spaces, copy the corres	sponding information from Se	ection A.		F	OR INSURANCE	COMPANY USE
Building Street Address (including Apt., Unit, St	uite, and/or Bldg. No.) or PO.	Route and Box No) .	Po	blicy Number:	
Dity	State	ZIP Code		C	ompany NAIC Nu	mber:
Longboat Key	FL	34228				
SECTION D - SI	URVEYOR, ENGINEER, O	R ARCHITECT	CERTIFICA	TION (CON	TINUED)	
copy both sides of this Elevation Certificate for	r (1) community official, (2) in	surance agent/co	mpany, and (3) building ov	wner.	
Section B Flood insurance rate	e map (FIRM) information	to be verified at	local F.E.N	A.A. control	office.	
Signature 70+1	$\gamma O \ell$	Date ocu	0/0045			
	With SUDVE	V NOT DEOLUD	6/2015		D ZONE A	
or Zones AO and A (without BFE), complete Ite	ems E1–E5. If the Certificate	is intended to sup	port a LOMA	or LOMR-F re	auest, comple	te Sections A. B.and C.
or Items E1-E4, use natural grade, if available	e. Check the measurement us	sed. In Puerto Rico	only, enter i	meters.	daged combin	
 Provide elevation information for the following grade (HAG) and the lowest adjacent grade 	ing and check the appropriate	e boxes to show w	hether the el	levation is ab	ove or below th	ne highest adjacent
a) Top of bottom floor (including basement,	crawlspace, or enclosure) is		_ feet	meters	above or	below the HAG.
b) Top of bottom floor (including basement,	crawlspace, or enclosure) is		feet	meters	above or	below the LAG.
2. For Building Diagrams 6–9 with permanent	flood openings provided in Se	ection A Items 8 a	nd/or 9 (see	pages 8-9 c	of Instructions)	,
the next higher floor (elevation C2.b in the	diagrams) of the building is		_ 🗌 feet	meters	above or	below the HAG.
3. Attached garage (top of slab) is			_ [] feet	meters	above or	below the HAG.
Top of platform of machinery and/or equipred.	ment servicing the building is	·	_ 🗌 feet	t 🗆 meters	above or	below the HAG.
 Zone AO only: If no flood depth number is a ordinance? Yes No Unknown. 	wailable, is the top of the bot . The local official must certif	tom floor elevated y this information	in accordan in Section G.	ce with the c	ommunity's floo	odplain management
SECTION F - PF	ROPERTY OWNER (OR O	WNER'S REPR	ESENTATIV	E) CERTIF	ICATION	
he property owner or owner's authorized repre	sentative who completes Sec	tions A, B, and E	for Zone A (w	vithout a FEM	A-issued or cor	mmunity-issued BFE) or
roperty Owner or Owner's Authorized Represer	ntative's Name	to the best of my	knowledge.			
ddress		City		State	ZIP C	ode
ignature		Date		Teleph	none	
omments	-					
					Checl	k here if attachments.
, S	ECTION G - COMMUNIT	TY INFORMATIC	ON (OPTIO	NAL)		
of this Elevation Certificate. Complete the app	licable item(s) and sign below.	Check the measu	nanagement rement used	in Items G8-	G10. In Puerto	tions A, B, C (or E), and Rico only, enter meters.
 The information in Section C was take who is authorized by law to certify ele 	en from other documentation vation information. (Indicate	that has been sig the source and d	gned and sea ate of the ele	aled by a lice evation data	nsed surveyor, in the Comme	, engineer, or architect nts area below.)
 A community official completed Section 	n E for a building located in Z	one A (without a F	EMA-issued	or community	-issued BFE) o	r Zone AO.
 The following information (Items G4–0) 	G10) is provided for commun	ity floodplain man	agement pu	rposes.		
4. Permit Number	G5. Date Permit Issued	G	6. Date Cert	tificate Of Cor	npliance/Occu	pancy Issued
7. This permit has been issued for:	w Construction Substa	antial Improvemen	t			
8. Elevation of as-built lowest floor (including	basement) of the building:		. D feet	meters	Datum	
 BFE OF (IN ZONE AU) depth of flooding at th 10. Community's design flood elevations. 	e building site:		. ⊔ feet	□ meters	Datum	
to. community s design flood elevation:			. Ll feet	⊔ meters	Datum	
ocal Official's Name		Title			DE	CENT
ommunity Name		Telephone			INE	UEIVE
		Date			J	UN 1 9 2015
oninenta					TOWNO	FLONGROAT
						A state of the
					Planning.	Zonleg and Build

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

Replaces all previous editions.









ICC-ES Evaluation Report

Most Widely Accepted and Trusted

ESR-2074 FBC Supplement

Issued July 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; FLOODVENTM OVERHEAD DOOR MODEL

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® 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

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

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

This supplement expires concurrently with the master report reissued December 1, 2012, revised June 2014.

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed ICC-ES Evaluation Reports are not to be construed as representing aestnetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as





ICC-ES Evaluation Report

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ESR-2074* Reissued December 2012 This report is subject to renewal February 1, 2015.

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

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[™]** #1540-520; FLOODVENT™ MODEL STACKING MODEL #1540-521; SMARTVENT™ MODEL #1540-510; SMARTVENT™ STACKING MODEL #1540-511; WOOD WALL FLOOD MODEL #1540-570; WOOD WALL OVERHEAD FLOOD DOOR MODEL FLOODVENT™ OVERHEAD DOOR MODEL #1540-524; #1540-574: 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. The SmartVENT™ Stacking Model #1540-511

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 #1540-524, and SmartVENT™ Overhead Door Model Model #1540-514 units measure $15^{3}/_{4}$ inches wide by $7^{3}/_{4}$ 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 #1540-511 and FloodVENT™ 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 June 2014



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[®] 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 2013 (editorially revised May 2014).

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).