# **ELEVATION CERTIFICATE**

OMB No. 1660-0008 Expiration Date: November 30

☐ Check here if attachments.		
	Date on, per C2(e), if applicable)	Date  Comments (including type of equipment and location, per C2(e), if applicable)
7.	Telephone	Community Name
	Title	Local Official's Name
et meters Datum	feet	G10. Community's design flood elevation:
at meters Datum	ouilding site: feet	G9. BFE or (in Zone AO) depth of flooding at the building site:
et  meters Datum	sement) feet	G8. Elevation of as-built lowest floor (including basement) of the building:
	☐ New Construction ☐ Substantial Improvement	G7. This permit has been issued for:
Date Certificate of Compliance/Occupancy Issued	Date Permit Issued G6.	G4. Permit Number 17-142379 B1
nent purposes.	The following information (Items G4–G10) is provided for community floodplain management purposes	G3. The following information (Items G4–G1)
//A-issued or community-issued BFE)	A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.	G2. A community official completed Section or Zone AO.
and sealed by a licensed surveyor, he source and date of the elevation	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.)	G1. The information in Section C was taken to engineer, or architect who is authorized data in the Comments area below.)
anagement ordinance can complete in below. Check the measurement	ance to administer the community's floodplain matificate. Complete the applicable item(s) and signeters.	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.
- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- COMMUNITY INFORMATION (OPTIONAL)	SECTION G
Company NAIC Number	State ZIP Code Florida 34229	City Osprey
Policy Number:	and/or Bldg. No.) or P.O. Route and Box No.	Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 940 N. Casey Key Road
JRANG	onding information from Section A.	IMPORTANT: In these spaces, copy the corresponding information from Section A.
באטוומווטוו טמנס. ושטשפוווטפו טט, בטוט		

# **ELEVATION CERTIFICATE**

OMB No. 1660-0008 Expiration Date: November 30, 2018

			Comments
hone	Telephone	Date	Signature
ZIP Code	State	City	Address
		Property Owner or Owner's Authorized Representative's Name	Property Owner
A (without a FEMA-issued or to the best of my knowledge.	tions A, B, and E for Zone ons A, B, and E are correct	The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best	The property ow community-issue
TIFICATION	EPRESENTATIVE) CERT	SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION	
om floor elevated in accordance with the community's The local official must certify this information in Section G.	om floor elevated in accord The local official must cert	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?	E5. Zone AO or floodplain m
above or below the HAG.	☐ feet ☐ meters	Top of platform of machinery and/or equipment servicing the building is	E4. Top of platfi servicing th
☐ above or ☐ below the HAG.	☐ feet ☐ meters	Attached garage (top of slab) is	E3. Attached ga
(see pages 1–2 of Instructions),  ☐ above or ☐ below the HAG.	8 and/or 9	For Building Diagrams 6–9 with permanent flood openings provided in Section A Items the next higher floor (elevation C2.b in the diagrams) of the building is	E2. For Building the next hig the diagram
above or below the LAG.	feet meters	Top of bottom floor (including basement, crawlspace, or enclosure) is	b) Top of b crawlspa
e elevation is above or below  ☐ above or ☐ below the HAG.	boxes to show whether the	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	E1. Provide eleventhe highest a) Top of became crawlsp.
DMA or LOMR-F request, nt used. In Puerto Rico only,	s intended to support a LO le, Check the measuremer	For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMI complete Sections A, B,and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Penter meters.	For Zones AO all complete Section enter meters.
REQUIRED)	TON	SECTION E - BUILDING ELEVATION INFORMATION (SURVEY FOR ZONE AO AND ZONE A (WITHOUT BFE)	
Company NAIC Number	ZIP Code Co 34229 Co	State ZI Florida 34	City Osprey
Policy Number:		Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 940 N. Casey Key Road	Building Street Address 940 N. Casey Key Road
FOR INSURANCE COMPANY USE		IMPORTANT: In these spaces, copy the corresponding information from Section A.	IMPORTANT: In

U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency National Flood Insurance Program

OMB No. 1660-0008 Expiration Date: November 30, 2018

# Important: Follow the instructions on pages 1-9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

ntected Area (OPA)? ☐ Yes [X] No	) area or Otherwise Pro	CBRS	B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?  Designation Date:
3	NAVD 1988 ☐ O	99: NGVD 1929	
m B9:	Base Flood Elevation (BFE) data or base flood depth entered in Item B9	(BFE) data or base flood mined ☐ Other/Source:	B10. Indicate the source of the Base Flood Elevation (BFE) ☐ FIS Profile 区 FIRM ☐ Community Determined
Base Flood Elevation(s) (Zone AO, use Base Flood Depth)	B8. Flood B9. (Zone(s) (10'	B7. FIRM Panel Effective/ Revised Date 11-04-2016	85. Suffix B6. FIRM Index Date 12115C0209
B3. State Florida	Name	B2. County Sarasota	B1. NFIP Community Name & Community Number Sarasota 125144
ATION	MAP (FIRM) INFORMATION	INSURANCE RATE	SECTION B – FLOOD
l (ye."		No	d) Engineerad flood openings? Yes 🗵 I
	<u>3</u>	0.00 sq in	c) Total net area of flood openings in A9.b
grade 0	1.0 foot above adjacent	tached garage within	b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade
		0.00 sq ft	a) Square footage of attached garage
			A9. For a building with an attached garage:
		No	d) Engineered flood openings? 🗵 Yes 🔲 I
	vc	3044.00 sq in	c) Total net area of flood openings in A8.b
e adjacent grade 18	e(s) within 1.0 foot above	awispace or enciosure	b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade
, 4	3579.34 sq ft	<b>c</b> a	<ul> <li>a) Square footage of crawlspace or enclosure(s):</li> </ul>
rance.	sed to obtain flood insur	e Certificate is being u	A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance
m: ☐ NAD 1927 🗵 NAD 1983	Horizontal Datum:	Long82.50341214°	A5. Latitude/Longitude: Lat. 27.19388419°
in	etc.) Residential	Addition, Accessory, 6	A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.
	yal Description, etc.)	x Parcel Number, Lega y PID #0146070004	A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)  Metes & Bounds in Section 09-38-18, Sarasota County PID #0146070004
ZIP Code 34229	111	State Florida	City Osprey
Company NAIC Number:	No.) or P.O. Route and	and/or Bldg.	<ul><li>A2. Building Street Address (including Apt., Unit, Suite, Box No.</li><li>940 N. Casey Key Road</li></ul>
rolley Nulliber.	2	2	Melody Beiler
FOR INSURANCE COMPANY USE		INFORMATION	SECTION A - PROPERTY INFORMATION

# **ELEVATION CERTIFICATE**

OMB No. 1660-0008 Expiration Date: November 30, 2018

attachments to this 9 page	Also 2 a	& 9 for additional photos. or flood vents used.	omments in Section D, added Page 8 C-ES Evaluation Report ESR-2074 to	NOTE: Added Page 7 for continued comments in Section D, added Page 8 & 9 for additional photos. Also 2 attachments to this 9 page document for Building Diagram and ICC-ES Evaluation Report ESR-2074 for flood vents used.
		Section D.	See Page 7 attached to this document for continuation of the comments in Section D	See Page 7 attached to this documen
		е)	of equipment and location, per C2(e), if applicable) #7 best fits this structure.	Comments (including type of equipment and locatio 3 story structure. Diagram #7 best fits this structure
pany, and (3) building owner.	agent/company, a	official, (2) insurance	ate and all attachments for (1) community	Copy all pages of this Elevation Certificate
	N/A Ext	Telephone (941) 341-9935	Date 07-10-2019	Signature 4
		ZIP Code 34240	State Florida	City Sarasota
7/40/19			С	Address 31 Sarasota Center Boulevard, Suite
SSESIE	È.			Company Name MSB Surveying, Inc.
はない。	Z			Title Surveyor & Mapper
A STATE OF THE STA	3/2		License Number LS 5538	Certifier's Name Martin S. Britt
X Check here if attachments.	X Q	/or? ⊠Yes □No	Were latitude and longitude in Section A provided by a licensed land surveyor?	Were latitude and longitude in Section
rtify elevation information. erstand that any false	aw to ce le. I und	r architect authorized by la interpret the data available Section 1001.	This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.	This certification is to be signed and s I certify that the information on this Co statement may be punishable by fine
	ATION	ARCHITECT CERTIFIC	SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION	SECTION
	9.34	<b>1</b>	Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	<ul> <li>h) Lowest adjacent grade at low structural support</li> </ul>
	8.73		ade next to building (HAG)	g) Highest adjacent (finished) grade next to building (HAG)
★ feet       □ meters     □	7.65		ade next to building (LAG)	f) Lowest adjacent (finished) grade next to building (LAG)
⊠ feet ☐ meters	12.90		y or equipment servicing the building and location in Comments)	<ul> <li>e) Lowest elevation of machinery or equipment servicing the (Describe type of equipment and location in Comments)</li> </ul>
★ feet       │ meters       │	N/A			d) Attached garage (top of slab)
★ feet       │ meters	N/A		Bottom of the lowest horizontal structural member (V Zones only)	c) Bottom of the lowest horizont
X feet ☐ meters	18.76			<li>b) Top of the next higher floor</li>
★ feet       │ meters	9.06		Top of bottom floor (including basement, crawlspace, or enclosure floor)	<ul> <li>a) Top of bottom floor (including</li> </ul>
Check the measurement used	Chec	the BFE.	<u>e</u> [	Datum used for building elevations must
		below.	Indicate elevation datum used for the elevations in items a) through h) below.	Indicate elevation datum used fo
		Vertical Datum: NAVD 1988	7-l Vertical Da	Benchmark Utilized: NGS BM 517-I
ly, enter meters.	E, AR/A Rico onl	ith BFE), AR, AR/A, AR/A fied in Item A7. In Puerto	Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters	C2. Elevations – Zones A1–A30, AE Complete Items C2.a–h below a
X Finished Construction		Building Under Construction* ▶ building is complete.	☐ Construction Drawings* [ e required when construction of the	C1. Building elevations are based on: *A new Elevation Certificate will b
כו	REQUIRED)		S - BUILDING ELEVATION INFORMATION (SURVEY	SECTION C
ny NAIC Number	Company NAIC	ZIP Code ( 34229	State Florida	City Osprey
lumber:	Policy Number:	•	, Unit, Suite, and/or Bldg. No.) or P.O.	Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No 940 N. Casey Key Road
SURANCE COMPANY USE	FOR INSURAN		he corresponding information from	IMPORTANT: In these spaces, copy the corresponding information from Section A

# **BUILDING PHOTOGRAPHS**

## **ELEVATION CERTIFICATE**

See Instructions for Item A6.

OMB No. 1660-0008 Expiration Date: November 30, 2018

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:
940 N. Casey Key Road	No.
City State ZIP Code	Company NAIC Number
Osprey Florida 34229	Para N

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.

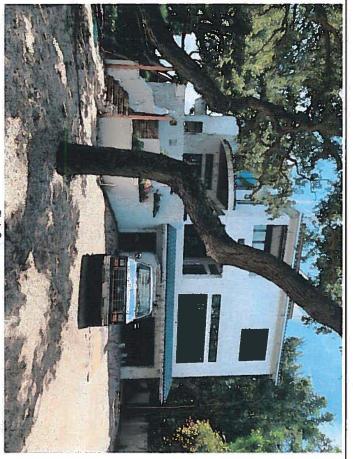


Photo One Caption (07/10/2019) Front view

Clear Photo One

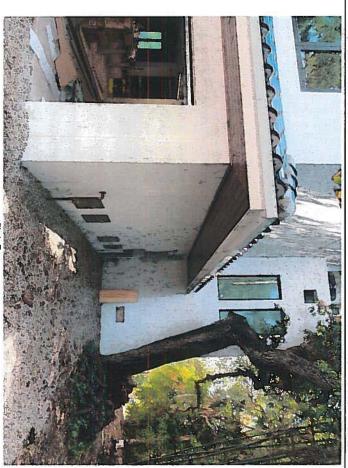


Photo Two Caption (07/10/2019) Right Side View From Front

Clear Photo Two

# **ELEVATION CERTIFICATE BUILDING PHOTOGRAPHS**

### Continuation Page

OMB No. 1660-0008 Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A. Osprey 940 N. Casey Key Road Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Florida State 34229 ZIP Code FOR INSURANCE COMPANY USE Company NAIC Number Policy 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.

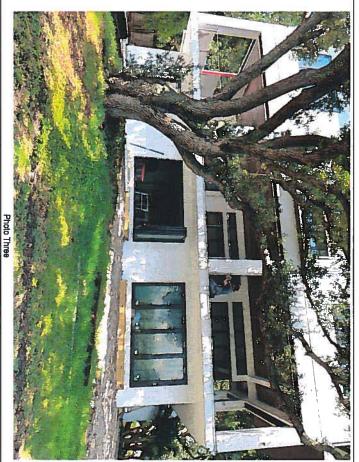


Photo Three Caption (07/10/2019) Rear view

Clear Photo Three

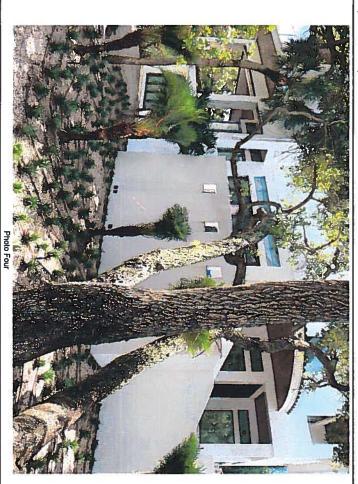


Photo Four Caption (07/10/2019) Left Side View From Front

Form Page 6 of 6

# ADDITIONAL SHEET FOR CONTINUED COMMENTS SECTION D 940 N. Casey Key Rd., Osprey, FL 34229

Base Flood Elevation per FEMA Map is 10'. Per Sarasota County Building 3 story structure. Diagram #7 best fits this structure Department, the Design Flood Elevation = 18.3'.

the finish floor, which consists of: A5. determined by Boundary Survey in State Plane & LABINS web site A8.b) denotes the number of openings in the exterior walls as measured 1.0' from A8.a) denotes the total sq.ft. of enclosed area in lower level.

accommodate 200 sq.ft. – 200x5= 1000 sq.ft. of enclosed area). vents will accommodate 400 sq.ft. - 400x9= 3600 sq.ft. of enclosed area). bottom of each vent. NOTE: all flood vents are above the 10' elevation as measured at the \*5 openings containing single Smart Vents Model #1540-520 (each vent will \*9 openings containing double Smart Vents Model #1540-521 (each pair of

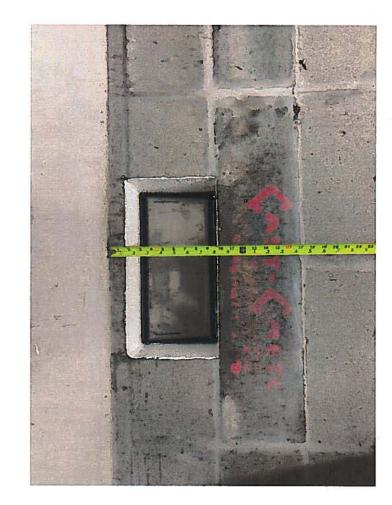
vents being installed. NOTE: exterior walls for enclosed areas on lower level are break away walls. A8.c) denotes the total area of the openings in all exterior walls prior to the flood \*4 openings in 2 turned block = 100 sq.in total, without covering

33.24' located on walkout level off 3rd floor. electric panel box on 2<sup>nd</sup> level = 22.26'. Bottom of tankless hot water heater = Bottom of elevated AC units located on walkout level off 3rd floor. Bottom of C2.b) denotes 2nd floor main living area finish floor. 3<sup>rd</sup> floor elevation = 32.24<sup>rd</sup> entry to upper level and elevator area. Bottom elevator shaft = 8.98. ground floor = 9.45', used for storage. Next level on ground floor = 9.98', used for C2a.) denotes the lowest ground floor elevation used for parking. Next level on Lowest Horizontal Structural Member = 17.41'. C2.e) denotes the bottom of the electric panel box located on lower level wall.

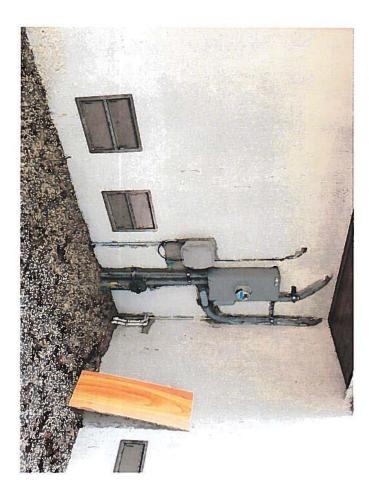
additional photos. Also 2 attachments to this 9 page document for Building NOTE: Added Page 7 for continued comments in Section D, added Page 8 & 9 for Diagram and ICC-ES Evaluation Report ESR-2074 for flood vents used

ADDITIONAL SHEET FOR PHOTOS

(07/10/2019) Typical Smart Vent Model #1540-520 used



(07/10/2019) Typical Double Smart Vent Model #1540-521



PAGE 8

# **ADDITIONAL SHEET FOR PHOTOS**

PAGE 9

(07/10/2019) Tank Less Hot Water Heater on outside wall off  $3^{rd}$  Level



(07/10/2019) Elevated AC Units Located off 3<sup>rd</sup> level of Structure

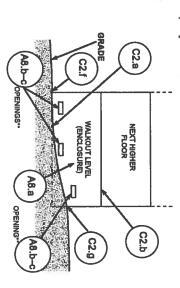


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			eric E
			.1 <b>₩</b> 3 <b>₩</b> R

#### DIAGRAM 7

All buildings elevated on full-story foundation walls with a partially or fully enclosed area below the elevated floor. This includes walkout levels, where at least 1 side is at or above grade. The principal use of this building is located in the elevated floors of the building.

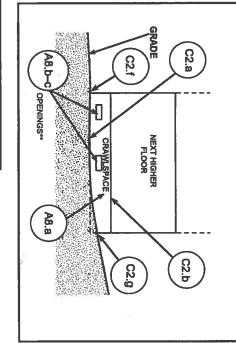
Distinguishing Feature – For all zones, the area below the elevated floor is enclosed, either partially or fully. In A Zones, the partially or fully enclosed area below the elevated floor is with or without openings\*\* present in the walls of the enclosure. Indicate information about enclosure size and openings in Section A – Property Information.



#### **DIAGRAM 8**

All buildings elevated on a crawlspace with the floor of the crawlspace at or above grade on at least 1 side, with or without an attached garage.

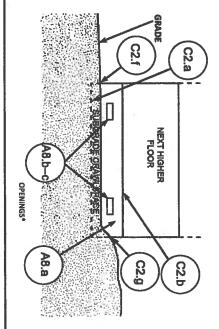
Distinguishing Feature – For all zones, the area below the first floor is enclosed by solid or partial perimeter walls. In all A zones, the crawlspace is with or without openings\*\* present in the walls of the crawlspace. Indicate information about crawlspace size and openings in Section A – Property Information.



#### DIAGRAM 9

All buildings (other than split-level) elevated on a subgrade crawlspace, with or without attached garage.

Distinguishing Feature – The bottom (crawlspace) floor is below ground level (grade) on all sides.\* (If the distance from the crawlspace floor to the top of the next higher floor is more than 5 feet, or the crawlspace floor is more than 2 feet below the grade [LAG] on all sides, use Diagram 2A or 2B.)



- garage, workshop, etc. A floor that is below ground level (grade) on all sides is considered a basement even if the floor is used for living purposes, or as an office,
- An "opening" is a permanent opening that allows for the free passage of water automatically in both directions without human intervention guidance on openings, see NFIP Technical Bulletin 1. the openings must be no higher than 1.0 foot above the higher of the exterior or interior grade or floor immediately below the opening. For more window, a door, or a garage door is not considered an opening; openings may be installed in doors. Openings shall be on at least 2 sides of the enclosed area. If a building has more than 1 enclosed area, each area must have openings to allow floodwater to directly enter. The bottom of submitted to document that the design of the openings will allow for the automatic equalization of hydrostatic flood forces on exterior walls. Engineered Flood Openings Certification or an Evaluation Report issued by the International Code Council Evaluation Service (ICC ES) must be 1 square inch for every square foot of area enclosed, excluding any bars, louvers, or other covers of the opening. Alternatively, an Individual Under the NFIP, a minimum of 2 openings is required for enclosures or crawlspaces. The openings shall provide a total net area of not less than

	9		
			- *
			•



Most Widely Accepted and Trusted

ESR-2074

Reissued 02/2017 Revised 10/2018

ICC-ES | (800) 423-6587 | (562) 699-0543 | www.icc-es.org **ICC-ES Evaluation Report** 

This report is subject to renewal 02/2019

**DIVISION: 08 00 00—OPENINGS** 

SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

#### REPORT HOLDER:

SMART VENT PRODUCTS, INC.

### **EVALUATION SUBJECT:**

#1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514 SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; FLOOD VENT SEALING KIT #1540-526





(WSSPC) Award in Excellence" "2014 Recipient of Prestigious Western States Seismic Policy Council

A Subsidiary of



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# ICC-ES Evaluation Report

**ESR-2074** 

Reissued February 2017

Revised October 16, 2018

This report is subject to renewal February 2019.

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:

**SMART VENT PRODUCTS, INC** 

### **EVALUATION SUBJECT:**

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-FLOOD VENT SEALING KIT #1540-526 511; #1540-570; #1540-574; #1540-524; #1540-514

#### . **EVALUATION SCOPE**

# Compliance with the following codes:

- 2016, 2015, 2012, 2009 and 2006 International Building Code® (IBC)
- **2018** 2018, 2015, 2012, 2 Residential Code® (IRC) 2015, 2009 and 2006 International
- 2018 International Energy Conservation Code® (IECC)
- 2013 Abu Dhabi International Building Code (ADIBC)<sup>T</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

natural ventilation. rising or falling flood waters. Certain models also allow hydrostatic pressure on walls operated flood vents The Smart Vent® units are engineered (FVs) employed of enclosures subject to ಠ mechanically equalize

#### 3.0 DESCRIPTION

#### 3.1 General:

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. When subjected to rising water, the Smart Vent® 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

> vertically arranged openings per unit. Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. The SmartVENT® Stacking Model #1540-511 and FloodVENT® Stacking Model #1540-521 units each contain two Each unit is fabricated from stainless steel. Smart Vent®

### 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.

#### Ventilation:

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 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. SmartVENT® Model #1540-510 and SmartVENT®

### 3.4 Flood Vent Sealing Kit:

Sound Barrier® (ESR-1374) insert with 21 - 2-inchinch (51 mm x 51 mm) squares cut in it. See Figure 4. The Flood Vent Sealing Kit Model #1540-526 is used with SmartVENT® Model #1540-520. It is a Homasote 440 Sound Barrier® (ESR-1374) insert with 21 - 2-inch-by-2-

#### 40 **DESIGN AND INSTALLATION**

# 4.1 SmartVENT® and FloodVENT®:

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: SmartVENT® walls of any thickness. In order to comply with instructions, the applicable code and this report. Installation clips allow mounting in masonry and concrete construction from the exterior side. vents must be in accordance with installed into walls or overhead doors of existing or new construction from the exterior side. Installation of the and FloodVENT® side. are the manufacturer's designed ಕ

- 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.

### 4.2 Flood Vent Sealing Kit

The Flood Vent Sealing Kit Model 1540-526 is used in conjunction with FloodVENT® Model #1540-520. When installed and tested in accordance with ASTM E283, the FV and Flood Vent Sealing Kit assembly have an air leakage rate of less than 0.2 cubic feet per minute per lineal foot (18.56 l/min per lineal meter) at a pressure differential of 1 pound per square foot (50 Pa) based on 12.58 lineal feet (3.8 lineal meters) contained by the Flood Vent Sealing Kit.

### 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® 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

- 6.1 Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015 (editorially revised October 2017).
- 6.2 Test report on air infiltration in accordance with ASTM E283.

#### 7.0 IDENTIFICATION

- 7.1 The Smart VENT<sup>®</sup> models and the Flood Vent Sealing Kit 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).
- 7.2 The report holder's contact information is the following:

SMART VENT PRODUCTS, INC. 430 ANDBRO DRIVE, UNIT 1 PITMAN, NEW JERSEY 08071 (877) 441-8368

nfo@smartvent.com

### TABLE 1-MODEL SIZES

FloodVent <sup>®</sup> Stacker	SmartVENT® Stacker	Wood Wall FloodVENT® Overhead Door	Wood Wall FloodVENT®	SmartVENT® Overhead Door	FloodVENT® Overhead Door	SmartVENT®	FloodVENT®	MODEL NAME
1540-521	1540-511	1540-574	1540-570	1540-514	1540-524	1540-510	1540-520	MODEL NUMBER
16" X 16"	16" X 16"	14" X 8 <sup>3</sup> / <sub>4</sub> "	14" X 8 <sup>3</sup> / <sub>4</sub> "	153/4" X 73/4"	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	153/4" X 73/4"	MODEL SIZE (in.)
400	400	200	200	200	200	200	200	COVERAGE (sq. ft.)

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

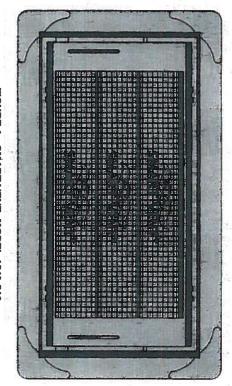


FIGURE 1—SMART VENT: MODEL 1540-510

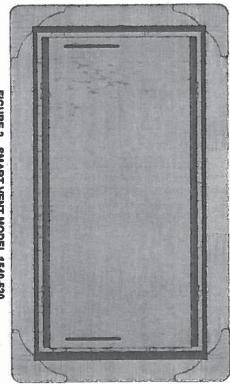


FIGURE 2—SMART VENT MODEL 1540-520

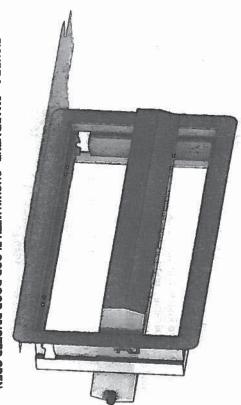


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN

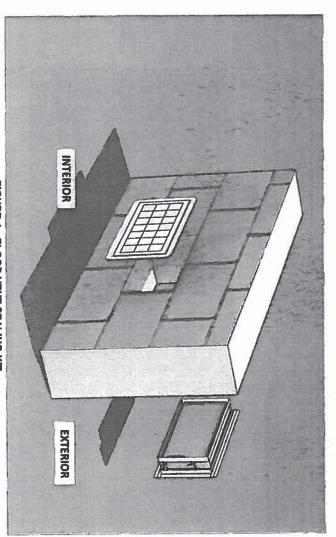


FIGURE 4—FLOOD VENT SEALING KIT



# **ICC-ES Evaluation Report**

# **ESR-2074 CBC and CRC Supplement**

Issued February 2017

Revised October 16, 2018 This report is subject to renewal February 2019.

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:

SMART VENT PRODUCTS, INC

### **EVALUATION SUBJECT:**

SMART VENT" AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-FLOOD VENT SEALING KIT #1540-526 570; #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 evaluation report ESR-2074, have also been evaluated for compliance with codes noted

### Applicable code edition:

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

#### 2.0 CONCLUSIONS

#### 2.1 CBC:

The Smart Vent® 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® (IBC) provisions noted in the master report and the additional requirements of CBC Chapters 12, 16 and 16A, as applicable.

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 under CBC Chapter 7A for use in the exterior design

#### 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* (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®.

This supplement expires concurrently with the master report, reissued February 2017 and revised October 16, 2018

# ICC-ES Evaluation Report

# ESR-2074 FBC Supplement

Reissued February 2017

This report is subject to renewal February 2019. Revised October 16, 2018

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A Subsidiary of the International Code Council®

DIVISION: 08 00 00—OPENINGS Section: 08 95 43—Vents/Found

-Vents/Foundation Flood Vents

REPORT HOLDER:

**SMART VENT PRODUCTS, INC** 

**EVALUATION SUBJECT:** 

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-614

FLOOD VENT SEALING KIT #1540-526

# 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:

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

#### 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 *Florida Building Code—Building* and the FRC, provided the design and installation are in accordance with the 2015 *International Building Code®* 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 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 October 16, 2018