ELEVATION CERTIFICATE			OMB No. 1660-0008 Expiration Date: November 30, 2022
IMPORTANT: In these spaces, copy the corre			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Su 4840 Featherbed Lane	· · · · · ·	.) or P.O. Route and Box N	No. Policy Number:
City Sarasota	State Florida	ZIP Code 34242	Company NAIC Number
SECTIO	NG-COMMUNIT	Y INFORMATION (OPTIO	NAL)
The local official who is authorized by law or ord Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, ent	Certificate. Complet	F the community's floodplate the applicable item(s) ar	ain management ordinance can complete and sign below. Check the measurement
G1. The information in Section C was take engineer, or architect who is authorize data in the Comments area below.)	en from other docum ed by law to certify e	entation that has been sig evation information. (Indic	ned and sealed by a licensed surveyor, cate the source and date of the elevation
G2. A community official completed Section or Zone AO.	on E for a building lo	cated in Zone A (without a	a FEMA-issued or community-issued BFE)
G3.  The following information (Items G4-	G10) is provided for	community floodplain mar	nagement purposes.
G4. Permit Number	G5. Date Permit Is	ssued	G6. Date Certificate of Compliance/Occupancy Issued
19 147672 B1			
G7. This permit has been issued for:	New Construction	Substantial Improveme	ent
G8. Elevation of as-built lowest floor (including of the building:	j basement)		feet [] meters Datum
G9. BFE or (in Zone AO) depth of flooding at t	the building site:		] feet [] meters Datum
G10. Community's design flood elevation:	_		feet meters Datum
Local Official's Name		Title	
Community Name		Telephone	
Signature		Date	
Comments (including type of equipment and loc	cation, per C2(e), if a	applicable)	
			Check here if attachments.

l

•

.

١

# **ELEVATION CERTIFICATE**

Important: Follow the instructions on pages 1-9.

Copy all pages of this Elevation Certificate and all attachments for (1) comm	unity official, (2) insurance agent/company, and (3) building owne
---	--

					y Unicial, (2) Insul	ance agentroumpan	iy, and (3) building owner.
		ION A - PROPERTY	INFOR	MATION			RANCE COMPANY USE
A1. Building Owner Glen and Rose Mar						Policy Num	ber:
A2. Building Street Box No.	Address (inc	duding Apt., Unit, Suite	e, and/oi	r Bidg. No.) o	P.O. Route and	Company N	AIC Number:
4840 Featherbed La	ane						
City			·	State		ZIP Code	
Sarasota				Florida		34242	
		nd Block Numbers, Ta lock D, Harmony Sub			gal Description, et	c.)	
A4. Building Use (e	.g., Residen	tial, Non-Residential,	Addition,	Accessory, e	etc.)		
A5. Latitude/Longit	ude: Lat. 27	7.282464 N	Long. <u>82</u>	2.561882 W	Horizonta	I Datum: 🔲 NAD 1	1927 🛛 NAD 1983
A6. Attach at least	2 photograp	hs of the building if the	e Certific	ate is being u	sed to obtain floo	d insurance.	
A7. Building Diagra	m Number	1B					
A8. For a building v	vith a crawls	pace or enclosure(s):					
a) Square foot	age of crawl	space or enclosure(s)			N/A sq ft		
b) Number of p	ermanent fic	ood openings in the cra	awlspace	e or enclosure	e(s) within 1.0 foo	t above adjacent gra	ade N/A
c) Total net are	ea of flood op	penings in A8.b		N/A sq in	I		
d) Engineered	flood openir	igs? 🗌 Yes 🗵 N	lo				
A9. For a building w	vith an attach	ed garage:					
a) Square foot	age of attach	ed garage		831.00 sq ft			
b) Number of p	ermanent flo	ood openings in the atl	tached g	arage within	1.0 foot above ad	jacent grade 4	
c) Total net are	a of flood op	enings in A9.b		880.00 sq	in		
d) Engineered	flood openin	gs? 🔀 Yes 🔲 N	lo				
		CTION B - FLOOD	NSURA	1		ORMATION	
B1. NFIP Communi Sarasota County 12	•	Community Number		B2. County Sarasota	Name		B3. State Florida
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Effe	RM Panel ective/	B8. Flood Zone(s)	B9. Base Flood E (Zone AO, us	Elevation(s) e Base Flood Depth)
12115C0141	F	11-04-2016	11-04-2	vised Date 2016	AE	10	
1		Base Flood Elevation	• •		•	d in Item B9:	
B11. Indicate eleva	ation datum u	used for BFE in Item B	19: 🔲 N	IGVD 1929	X NAVD 1988	Other/Source:	
B12. Is the building	located in a	a Coastal Barrier Reso	ources Sv	ystem (CBRS	) area or Otherwi	se Protected Area (	OPA)?  Yes X No
Designation I	-	_			,		
_	<u> </u>						

ELEVATION CERTIFICATE			OMB No. 1660-0008 Expiration Date: November 30, 2022
IMPORTANT: In these spaces, copy the cor	responding information	from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, \$ 4840 Featherbed Lane			Policy Number:
City	State	ZIP Code	Company NAIC Number
Sarasota	Florida	34242	
SECTION C - BU	ILDING ELEVATION IN	FORMATION (SURVEY I	REQUIRED)
C1. Building elevations are based on:	Construction Drawings*	Building Under Const	ruction* 🔀 Finished Construction
*A new Elevation Certificate will be requ	ired when construction of	the building is complete.	
C2. Elevations – Zones A1–A30, AE, AH, A Complete Items C2.a–h below accordin	(with BFE), VE, V1–V30, g to the building diagram	V (with BFE), AR, AR/A, A specified in Item A7. In Pue	R/AE, AR/A1–A30, AR/AH, AR/AO. arto Rico only, enter meters.
Benchmark Utilized: <u>cOUNTY bm 80-J</u>	Vertic	al Datum: (NGVD) EL 4.77	(NAVD) EL 3.71
Indicate elevation datum used for the el	evations in items a) throug	gh h) below.	
🗌 NGVD 1929 🕅 NAVD 1988			
Datum used for building elevations mus	t be the same as that use	d for the BFE.	Check the measurement used.
a) Top of bottom floor (including basem	ent, crawlspace, or enclo	sure floor)	11.6 🗙 feet 🗌 meters
b) Top of the next higher floor	•	,	N/A 🗙 feet 🔲 meters
c) Bottom of the lowest horizontal struc	tural member (V/Zones o		— N/A ⊠ feet meters
d) Attached garage (top of slab)			6.2 🔀 feet 🔲 meters
<ul> <li>e) Lowest elevation of machinery or eq (Describe type of equipment and loc)</li> </ul>	uipment servicing the bui	lding	11.0 🔀 feet 🔲 meters
f) Lowest adjacent (finished) grade ne			5.0 🔀 feet 🔲 meters
, , , , , , ,			5.5 X feet meters
g) Highest adjacent (finished) grade ne			
<ul> <li>h) Lowest adjacent grade at lowest ele structural support</li> </ul>	vation of deck or stairs, in		5.5 🗙 feet 🗌 meters
SECTION D - S	URVEYOR, ENGINEER	, OR ARCHITECT CERTI	FICATION
This certification is to be signed and sealed I certify that the information on this Certifical statement may be punishable by fine or imp	e represents my best effo	orts to interpret the data ava	by law to certify elevation information. ilable. I understand that any false
Were latitude and longitude in Section A pro			Check here if attachments.
Certifier's Name	License Nu	umber	BID
James B. Burchett	LS5701		BURCA
Title President			3.48. 691.4
Company Name			- B Burchett
Sampey, Burchett and Knight, Inc.			6 No. 5701
Address			STATE OF
1570 Global Court			8-31-20
City	State	ZIP Code	Sor VOA
Sarasota	Florida	34240	URVE
Signature A A ISIA	Date	Telephone	Ext.
James D Durchet	08-31-202		
Copy all pages of this Elevation Certificate and	d all attachments for (1) co	mmunity official, (2) insurance	æ agent/company, and (3) building owner.
Comments (including type of equipment and A9(d) 4 Model FFWF08 Flood Flap Flood Ve	ents were used providing		n for a total of 880 sq. ft. of coverage.
C2(e) A/C unit on the right side of residence	·•		
]			
1			
1			

•

ELEVATION CERTIFICATE			OMB No. 1660-0008 Expiration Date: November 30, 2022
IMPORTANT: In these spaces, copy the co	responding information	n from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, 4840 Featherbed Lane	Suite, and/or Bldg. No.) c	er P.O. Route and Box No.	
City Sarasota	State Florida	ZIP Code 34242	Company NAIC Number
	DING ELEVATION INF OR ZONE AO AND ZO	ORMATION (SURVEY N NE A (WITHOUT BFE)	OT REQUIRED)
For Zones AO and A (without BFE), complete complete Sections A, B, and C. For Items E1 enter meters.	Items E1–E5. If the Cert E4, use natural grade, if	ificate is intended to support available. Check the meas	ort a LOMA or LOMR-F request, surement used. In Puerto Rico only,
<ul> <li>E1. Provide elevation information for the follo the highest adjacent grade (HAG) and th a) Top of bottom floor (including basement</li> </ul>	e lowest adjacent grade (	opriate boxes to show whe (LAG).	ether the elevation is above or below
crawlspace, or enclosure) is b) Top of bottom floor (including baseme		feet 🗌 m	eters above or below the HAG.
crawlspace, or enclosure) is E2. For Building Diagrams 6–9 with permane		feet m	
the next higher floor (elevation C2.b in the diagrams) of the building is		feet m	
E3. Attached garage (top of slab) is		[] feet [] m	eters above or below the HAG.
E4. Top of platform of machinery and/or equi servicing the building is	pment	feet [] m	eters above or below the HAG.
E5. Zone AO only: If no flood depth number i floodplain management ordinance?			n accordance with the community's ust certify this information in Section G.
SECTION F - PROPE	RTY OWNER (OR OWN	ER'S REPRESENTATIVE	) CERTIFICATION
The property owner or owner's authorized rep community-issued BFE) or Zone AO must sig	presentative who complet n here. The statements i	es Sections A, B, and E fo n Sections A, B, and E are	or Zone A (without a FEMA-issued or correct to the best of my knowledge.
Property Owner or Owner's Authorized Repre	sentative's Name	· · · · · · · · · · · · · · · · · · ·	
Address		City	State ZIP Code
Signature		Date	Telephone
Comments	·····		
· · · · ·			
			Check here if attachments.

•

Form Page 3 of 6

## **ELEVATION CERTIFICATE**

### **BUILDING PHOTOGRAPHS**

See Instructions for Item A6.

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, co	py the corresponding information	on from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including A 4840 Featherbed Lane	Apt., Unit, Suite, and/or Bldg. No.)	or P.O. Route and Box No	p. Policy Number:
City Sarasota	State Florida	ZIP Code 34242	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.

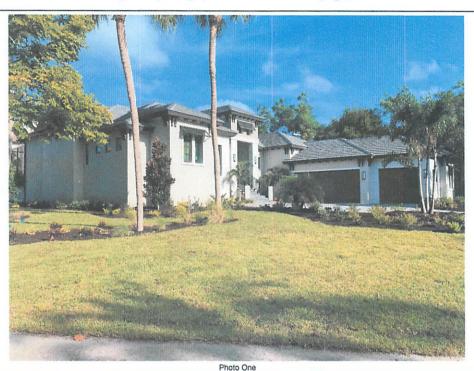


Photo One Caption Front 08-28-2020

Clear Photo One

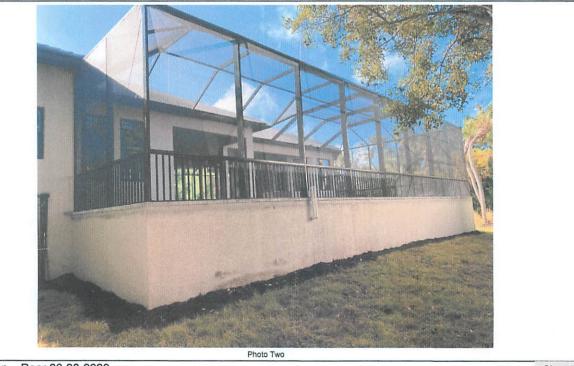


Photo Two Caption Rear 08-28-2020

## **ELEVATION CERTIFICATE**

## **BUILDING PHOTOGRAPHS**

Continuation Page

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, cop	by the corresponding information	on from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including A 4840 Featherbed Lane	pt., Unit, Suite, and/or Bldg. No.)	or P.O. Route and Box No.	Policy Number:
City	State	ZIP Code	Company NAIC Number
Sarasota	Florida	34242	

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.

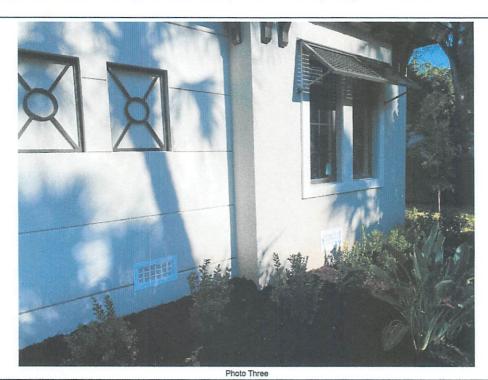


Photo Three Caption Front side of garage 08/28/2020

#### **Clear Photo Three**



Photo Four Caption Right side of garage 08-28-2020



## **ICC-ES Evaluation Report**

## **ESR-3560**

Reissued September 2019

This report is subject to renewal September 2020.

A Subsidiary of the International Code Council®

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:**

FLOOD FLAPS<sup>®</sup>, LLC

#### **EVALUATION SUBJECT:**

FLOOD FLAPS<sup>®</sup> AUTOMATIC FLOOD VENTS: MODELS FFWF12; FFNF12; FFWF08; FFNF08; FFWF05; FFNF05

#### **1.0 EVALUATION SCOPE**

#### Compliance with the following codes:

- 2018, 2015, 2012 and 2009 *International Building Code*<sup>®</sup> (IBC)
- 2018, 2015, 2012 and 2009 International Residential Code<sup>®</sup> (IRC)

#### **Properties evaluated:**

- Physical operation
- Water flow
- Weathering

#### 2.0 USES

Flood Flaps<sup>®</sup> automatic flood vents are used to provide for the equalization of hydrostatic flood forces on exterior walls. Certain models also allow natural ventilation.

#### 3.0 DESCRIPTION

#### 3.1 General:

Flood Flaps<sup>®</sup> automatic flood vents are engineered mechanically operated flood vents (FVs) that automatically allow flood waters to enter and exit enclosed areas. The FVs are constructed of ABS plastic which serves as the FV's housing, and a front grill that contains an anodized metal screen imbedded in polypropylene plastic. On contact with rising flood water, the grill will disengage from its secured position, allowing flood water and debris to flow through in either direction. The FVs are available in two series as described in Section 3.3.

The sealed series models contain two rubber flaps that close the FV to the passage of air when using with conditioned areas or sealed crawl spaces. In the same manner as the grill, the two rubber flaps are pushed open by water pressure, allowing water and debris to flow through the FV in either direction. See Figure 1 for an illustration of the Flood Flaps<sup>®</sup> automatic FV.

#### 3.2 Engineered Opening:

The Flood Flaps<sup>®</sup> automatic FVs comply with the design principle noted in Sections 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 (2018 and 2015 IBC and IRC) [Section 2.6.2.2 of ASCE/SEI 24-05 (2012 and 2009 IBC and IRC)] for a rate of rise and fall of 5 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Flood Flaps<sup>®</sup> automatic FVs must be installed in accordance with Section 4.0.

#### 3.3 Flood Vent Series Models:

Flood Flaps<sup>®</sup> automatic FVs are available in two series with multiple models and sizes as described in Table 1. The sealed series models, designated FFWF, include two rubber flaps for the prevention of air flow. The multipurpose series, designated FFNF, omits the rubber flaps.

#### 3.4 Natural Ventilation:

Flood Flaps<sup>®</sup> automatic FV models FFNF12, FFNF08, FFNF05, and FFNF02 have metal screens with  $^{1}/_{4}$  inch by  $^{1}/_{4}$  inch (6 mm by 6 mm) openings and provide 37 square inches (0.02 m<sup>2</sup>) of net free opening to supply natural ventilation for under-floor ventilation. Flood Flaps<sup>®</sup> automatic FV models FFWF12, FFWF08, and FFWF05 have not been evaluated for use as openings for under-floor ventilation.

#### 4.0 DESIGN AND INSTALLATION

Flood Flaps<sup>®</sup> automatic FVs are designed to be installed into walls of existing or new construction. Installation of the FVs must be in accordance with the manufacturer's instructions, the applicable code and this report. Flood Flaps<sup>®</sup> automatic FVs can be installed in wood, masonry and concrete walls up to a thickness of 12 inches (305 mm). In order to comply with the engineered opening design principle noted in Sections 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 (2018 and 2015 IBC and IRC) [Section 2.6.2.2 of ASCE/SEI 24-05 (2012 and 2009 IBC and IRC)], the Flood Flaps<sup>®</sup> 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 220 square feet (20 m<sup>2</sup>) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305 mm) above grade.

#### 5.0 CONDITIONS OF USE

The Flood  $\mathsf{Flaps}^{\circledast}$  automatic flood vents described in this report comply with, or are suitable alternatives to what is

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 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 to any finding or other matter in this report, or as to any product covered by the report.



specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- **5.1** The Flood Flaps<sup>®</sup> automatic 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 Flood Flaps<sup>®</sup> automatic FVs must not be used in 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 (editorially revised October 2017).

#### 7.0 IDENTIFICATION

**7.1** The Flood Flaps<sup>®</sup> models recognized in this report are identified by a label bearing the manufacturer's name, the model number, and the evaluation report number (ESR-3560).

**7.2** The report holder's contact information is the following:

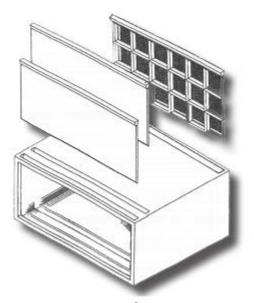
FLOOD FLAPS<sup>®</sup>, LLC POST OFFICE BOX 1003 ISLE OF PALMS, SOUTH CAROLINA 29451 (843) 881-0190 www.floodflaps.com info@floodflaps.com

MODEL NUMBER	MODEL DESIGNATION	ROUGH OPENING (Width X Height) (inches)	VENT SIZE (W X H X D) (inches)	ENCLOSED AREA COVERAGE (ft <sup>2</sup> )	NET FREE AREA OPENING <sup>1</sup> (in <sup>2</sup> )
FFWF12	Sealed Series	16 x 8	15 <sup>5</sup> / <sub>8</sub> X 7 <sup>3</sup> / <sub>4</sub> X 12	220	NA
FFNF12	Multi-Purpose	16 x 8	15 <sup>5</sup> / <sub>8</sub> X 7 <sup>3</sup> / <sub>4</sub> X 12	220	37
FFWF08	Sealed Series	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 8	220	NA
FFNF08	Multi-Purpose	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 8	220	37
FFWF05	Sealed Series	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 5	220	NA
FFNF05	Multi-Purpose	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 5	220	37

#### TABLE 1—FLOOD FLAP AUTOMATIC FLOOD VENT MODEL SIZES

For **SI**: 1 inch = 25.4 mm; 1  $f^{t2}$  = 0.093 m<sup>2</sup>

<sup>1</sup>For under-floor ventilation only.



				solution in the second s				
100000								

FIGURE 2—FLOOD FLAPS® AUTOMATIC FLOOD VENT SERIES MODELS



FIGURE 3—FLOOD FLAPS® AUTOMATIC FLOOD VENTS MULTIPLE DEPTH OFFERINGS



## **ICC-ES Evaluation Report**

## **ESR-3560 FBC Supplement**

Reissued September 2019 This report is subject to renewal September 2020.

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:**

FLOOD FLAPS<sup>®</sup>, LLC

#### EVALUATION SUBJECT:

#### FLOOD FLAPS® AUTOMATIC FLOOD VENTS: MODELS FFWF12; FFNF12; FFWF08; FFNF08; FFWF05; FFNF05

#### 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that Flood Flaps<sup>®</sup> automatic flood vents, recognized in ICC-ES master evaluation report ESR-3560, 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 Flood Flaps flood vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3560, comply with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, provided the design and installation are in accordance with the 2015 *International Building Code*<sup>®</sup> provisions noted in the master report.

Use of the Flood Flaps 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 September 2019.

