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

OMB Control No. 1660-0008 Expiration Date: 06/30/2026

## **ELEVATION CERTIFICATE**IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 1-11

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

SECTION A - PROPERTY INFORMATION	FOR INSURANCE COMPANY USE			
A1. Building Owner's Name: ROBERGE STEVEN ROBERGE LISA	Policy Number:			
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 1608 LANDFALL DRIVE	Company NAIC Number:			
City: NOKOMIS State: FLORIDA	ZIP Code: 34275			
A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Nun LOT 5, LAUREL LANDING ESTATES, TAX I.D. #0380130024	nber:			
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): RESIDENTIAL				
A5. Latitude/Longitude: Lat. 27.137868° Long82.430504° Horizontal Datum: N	AD 1927 NAD 1983 WGS 84			
A6. Attach at least two and when possible four clear photographs (one for each side) of the building	g (see Form pages 7 and 8).			
A7. Building Diagram Number: 1B				
A8. For a building with a crawlspace or enclosure(s):				
a) Square footage of crawlspace or enclosure(s): N/A sq. ft.				
b) Is there at least one permanent flood opening on two different sides of each enclosed area?	Yes No N/A			
c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot Non-engineered flood openings: N/A Engineered flood openings: N/A	above adjacent grade:			
d) Total net open area of non-engineered flood openings in A8.c:N/A sq. in.				
e) Total rated area of engineered flood openings in A8.c (attach documentation – see Instruction	ons): N/A sq. ft.			
f) Sum of A8.d and A8.e rated area (if applicable – see Instructions): N/A sq. ft.				
A9. For a building with an attached garage:				
a) Square footage of attached garage: 441 sq. ft.				
b) Is there at least one permanent flood opening on two different sides of the attached garage?	Yes No N/A			
<ul> <li>c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adjation Non-engineered flood openings:</li> <li>N/A</li> <li>Engineered flood openings:</li> </ul>	acent grade:			
d) Total net open area of non-engineered flood openings in A9.c: $N/A = N/A$ sq. in.				
e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instruction	ons): 660 sq. ft.			
f) Sum of A9.d and A9.e rated area (if applicable – see Instructions): sq. ft.				
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFOR	RMATION			
B1.a. NFIP Community Name: SARASOTA COUNTY  B1.b. NFIP Community Idea	ntification Number: 125144			
B2. County Name: SARASOTA B3. State: FL B4. Map/Panel No.:	12115C/0243 B5. Suffix: G			
B6. FIRM Index Date: 03/27/2024 B7. FIRM Panel Effective/Revised Date: 03/27/20	024			
B8. Flood Zone(s): AE B9. Base Flood Elevation(s) (BFE) (Zone AO, use E	Base Flood Depth): 8			
B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9:  ☐ FIS ☐ FIRM ☐ Community Determined ☐ Other:				
B11. Indicate elevation datum used for BFE in Item B9:   NGVD 1929  NAVD 1988  Other	/Source:			
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?				
B13. Is the building located seaward of the Limit of Moderate Wave Action (LiMWA)?	No			

## **ELEVATION CERTIFICATE**

**IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 1-11** 

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Bo	x No.:	FOR INSURANCE COMPANY USE				
1608 LANDFALL DRIVE	Policy Number:					
City: NOKOMIS State: FLORIDA ZIP Code: 34275		Company NAIC Number:				
SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)						
C1. Building elevations are based on: Construction Drawings* Building Under Construction* Finished Construction  *A new Elevation Certificate will be required when construction of the building is complete.						
C2. Elevations – Zones A1–A30, AE, AH, AO, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, A99. Complete Items C2.a–h below according to the Building Diagram specified in Item A7. In Puerto Rico only, enter meters.  Benchmark Utilized: PLAT B.M. #380-B, EL. 4.83' Vertical Datum: N.G.V.D. 1929						
Indicate elevation datum used for the elevations in items a) through h) below.  ☐ NGVD 1929 ■ NAVD 1988 ☐ Other:						
Datum used for building elevations must be the same as that used for the BFE. Conver If Yes, describe the source of the conversion factor in the Section D Comments area.	sion factor us	sed? Yes No Check the measurement used:				
a) Top of bottom floor (including basement, crawlspace, or enclosure floor):		11.4 feet meters				
b) Top of the next higher floor (see Instructions):		N/A feet meters				
c) Bottom of the lowest horizontal structural member (see Instructions):		N/A feet meters				
d) Attached garage (top of slab):		7.6 feet meters				
<ul> <li>e) Lowest elevation of Machinery and Equipment (M&amp;E) servicing the building (describe type of M&amp;E and location in Section D Comments area):</li> </ul>		11.4 feet meters				
f) Lowest Adjacent Grade (LAG) next to building:   Natural Finished		7.0 feet meters				
g) Highest Adjacent Grade (HAG) next to building:   Natural Finished		8.5 feet meters				
<ul> <li>Finished LAG at lowest elevation of attached deck or stairs, including structural support:</li> </ul>		11.2 feet meters				
SECTION D – SURVEYOR, ENGINEER, OR ARCHIT	ECT CERTI	TIFICATION				
This certification is to be signed and sealed by a land surveyor, engineer, or architect a information. I certify that the information on this Certificate represents my best efforts to false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section	interpret the	state law to certify elevation e data available. I understand that any				
Were latitude and longitude in Section A provided by a licensed land surveyor?	es 🗌 No					
Check here if attachments and describe in the Comments area.						
Certifier's Name: B. GREGORY RIETH, PSM, CFM License Number: 5228						
Title: VICE PRESIDENT		WHITE GORY PHILIPPE				
Company Name: BENNETT-PANFIL, INC.		O SIGN THE CALLET				
Address: 742 SHAMROCK BLVD		NO. 5228 * * * * * * * * * * * * * * * * * *				
City: VENICE State: Florida ZIP Code:	34293	- STATE OF THE STA				
Certifier's Name: B. GREGORY RIETH, PSM, CFM License Number: 5228  Title: VICE PRESIDENT  Company Name: BENNETT-PANFIL, INC.  Address: 742 SHAMROCK BLVD  City: VENICE State: Florida ZIP Code: 34293  Digitally signed by Bernard G  Rieth Date: 2024.05.21 12:23:20 -04'00' Date: 04/24/2024						
Telephone: (941) 497-1290 Ext.: Email: INFO@BPISURVEY.CC	ΡΜ	Place Seal Here				
Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2	2) insurance a	agent/company, and (3) building owner.				
Comments (including source of conversion factor in C2; type of equipment and location per C2.e; and description of any attachments):						
[Section A5] Derived from a hand held G.P.S. unit (GPSTEST App - No Conversion). [Section A9] Engineered openings manufactured by Flood Flaps model number FFNF08 ICC-ES R [Section C] Elevations were converted from N.G.V.D. 1929 to N.A.V.D. 1988 using Corpscon version of Original Survey "AE" (10') 12015C-0243F, 11/04/2016.						

Date of Field Survey: 04/19/2024 (File #21-05-95)

## **ELEVATION CERTIFICATE**

**IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 1-11** 

	.,						
Building Street Address (including Apt., Un 1608 LANDFALL DRIVE	FOR INSURANCE COMPANY USE						
City: NOKOMIS State: FLORIDA ZIP Code: 34275			Policy Number:				
City. MOROWIO	Company NAIC Number:						
SECTION E – BUILDING MEASUREMENT INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO, ZONE AR/AO, AND ZONE A (WITHOUT BFE)							
For Zones AO, AR/AO, and A (without BFE), complete Items E1–E5. For Items E1–E4, use natural grade, if available. If the Certificate is intended to support a Letter of Map Change request, complete Sections A, B, and C. Check the measurement used. In Puerto Rico only, enter meters.							
Building measurements are based on: Construction Drawings* Building Under Construction* Finished Construction *A new Elevation Certificate will be required when construction of the building is complete.							
E1. Provide measurements (C.2.a in approxime measurement is above or below the		following and check the	e appropriate boxes to show whether the				
<ul> <li>a) Top of bottom floor (including bas crawlspace, or enclosure) is:</li> </ul>	sement, 	_	rs				
<ul> <li>b) Top of bottom floor (including bas crawlspace, or enclosure) is:</li> </ul>	sement, 	_	rs  above or  below the LAG.				
	nanent flood openings provided i	n Section A Items 8 and	d/or 9 (see pages 1–2 of Instructions), the				
next higher floor (C2.b in applicable Building Diagram) of the building is:		☐ feet ☐ mete	rs above or below the HAG.				
E3. Attached garage (top of slab) is:			rs  above or  below the HAG.				
E4. Top of platform of machinery and/or servicing the building is:	equipment		rs				
E5. Zone AO only: If no flood depth num floodplain management ordinance?			accordance with the community's must certify this information in Section G.				
SECTION F - PROPERTY	OWNER (OR OWNER'S AUT	HORIZED REPRESI	ENTATIVE) CERTIFICATION				
The property owner or owner's authorize			r Zone A (without BFE) or Zone AO must				
sign here. <i>The statements in Sections A,</i> Check here if attachments and descr		of my knowledge					
Property Owner or Owner's Authorized R							
Address:		State:	ZIP Code:				
Oity.			Zii Gode				
Signature:		Date:					
Telephone: E	xt.: Email:						
Comments:							

## **ELEVATION CERTIFICATE**

**IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 1-11** 

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:				FOR INSURANCE COMPANY USE		
608 LANDFALL DRIVE  ity: NOKOMIS  State:FLORIDA ZIP Code: 34275		Policy Number:				
City: NOROWIS	State: LONDA ZIP Code: 04273		Company NAIC Number:			
SECTION G - COMMUNITY INFOR	MATION (RECOMMENDED F	OR COMMUNI	TY OFFICIA	L COMPLETION)		
The local official who is authorized by law or ord Section A, B, C, E, G, or H of this Elevation Cer				rdinance can complete		
G1. 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 state law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)						
G2.a. A local official completed Section E : E5 is completed for a building locate		vithout a BFE), Zo	one AO, or Zo	ne AR/AO, or when item		
G2.b. $\square$ A local official completed Section H	for insurance purposes.					
G3.	the local official describes specifi	c corrections to the	ne informatior	n in Sections A, B, E and H		
G4.	-G11) is provided for community f	loodplain manage	ement purpos	es.		
G5. Permit Number:	G6. Date Permit Issued:					
G7. Date Certificate of Compliance/Occupan	cy Issued:	_				
G8. This permit has been issued for: Ne	ew Construction   Substantial I	mprovement				
G9.a. Elevation of as-built lowest floor (including)	ng basement) of the	feet	meters	Datum:		
G9.b. Elevation of bottom of as-built lowest ho member:	rizontal structural		meters	Datum:		
G10.a. BFE (or depth in Zone AO) of flooding at	t the building site:	feet	meters	Datum:		
G10.b. Community's minimum elevation (or deprequirement for the lowest floor or lowes member:		□ feet	☐ meters	Datum:		
G11. Variance issued?  Yes No I	f yes, attach documentation and d	escribe in the Co				
The local official who provides information in Se correct to the best of my knowledge. If applicable	ction G must sign here. I have co le, I have also provided specific co	mpleted the informorrections in the C	mation in Sec Comments are	tion G and certify that it is ea of this section.		
Local Official's Name:	Tit	le:				
NFIP Community Name:						
	Email:					
Address:						
City:						
Signature:	Date	e:				
Comments (including type of equipment and loc Sections A, B, D, E, or H):	ation, per C2.e; description of any	/ attachments; an	d corrections	to specific information in		

## **ELEVATION CERTIFICATE**

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 1-11

			L INSTRUCTIONS ON FACI		
Building Street Address (including a 1608 LANDFALL DRIVE	Apt., Unit, Suite,	, and/or Bldg. No.) or l	P.O. Route and Box No.:	FOR INSURANCE COMPANY USE	
City: NOKOMIS		State: FLORIDA	ZIP Code: 34275	Policy Number:	
		Company NAIC Number:			
			HEIGHT INFORMATION INSURANCE PURPOSE		
to determine the building's first flo	oor height for ins onth of a meter in	surance purposes. So n Puerto Rico). <b>Refe</b>	ections A, B, and I must also rence the Foundation Type	be complete Section H for all flood zones be completed. Enter heights to the Diagrams (at the end of Section H complete this section.	
H1. Provide the height of the top	of the floor (as	indicated in Foundat	ion Type Diagrams) above th	ne Lowest Adjacent Grade (LAG):	
a) For Building Diagrams 1 floor (include above-grade flo subgrade crawlspaces or end	oors only for buil	ildings with		meters above the LAG	
b) For Building Diagrams 2 higher floor (i.e., the floor aborence floor) is:				meters above the LAG	
H2. Is <b>all</b> Machinery and Equipm H2 arrow (shown in the Foun  Yes No				ted to or above the floor indicated by the opropriate Building Diagram?	
SECTION I - PROPI	ERTY OWNER	R (OR OWNER'S A	AUTHORIZED REPRESE	NTATIVE) CERTIFICATION	
The property owner or owner's au	ıthorized repres	sentative who comple	etes Sections A, B, and H mu	st sign here. The statements in Sections	
indicate in Item G2.b and sign Se		age. <b>Note:</b> If the loca	ii iloodpiaiii management oiii	cial completed Section H, they should	
	ction G.			•	
indicate in Item G2.b and sign Se	ction G. provided (inclu	uding required photos		•	
indicate in Item G2.b and sign Se  Check here if attachments are  Property Owner or Owner's Author  Address:	ction G. provided (inclu	uding required photos	s) and describe each attachm	•	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address:	ction G. provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City:	ction G. provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address:  City:  Signature:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address:  City:  Signature:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	
indicate in Item G2.b and sign Se  Check here if attachments are Property Owner or Owner's Author Address: City: Signature: Telephone:	ction G. e provided (inclu prized Represen	uding required photos	s) and describe each attachm	nent in the Comments area.	

# ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 1-11 BUILDING PHOTOGRAPHS

See Instructions for Item A6.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:		FOR INSURANCE COMPANY USE	
1608 LANDFALL DRIVE City: NOKOMIS	State: FLORIDA ZIP Code: 34275	Policy Number:	

Instructions: Insert below at least two and when possible four photographs showing each side of the building (for example, may only be able to take front and back pictures of townhouses/rowhouses). Identify all photographs with the date taken and "Front View," "Rear View," "Right Side View," or "Left Side View." Photographs must show the foundation. When flood openings are present, include at least one close-up photograph of representative flood openings or vents, as indicated in Sections A8 and A9.



Photo One

Photo One Caption:

[FRONT VIEW; PHOTO TAKEN 04/19/2024]

Clear Photo One



Photo Two

Photo Two Caption: [SIDE VIEW; PHOTO TAKEN 04/19/2024]]

Clear Photo Two

# ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 1-11 BUILDING PHOTOGRAPHS

Continuation Page

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:		FOR INSURANCE COMPANY USE
1608 LANDFALL DRIVE		Deliev Number
City: NOKOMIS	State: FLORIDA ZIP Code: 34275	Policy Number:
Oity.	Otato	Company NAIC Number:

Insert the third and fourth photographs below. Identify all photographs with the date taken and "Front View," "Rear View," "Right Side View," or "Left Side View." When flood openings are present, include at least one close-up photograph of representative flood openings or vents, as indicated in Sections A8 and A9.



Photo Three

Photo Three Caption:

[REAR VIEW; PHOTO TAKEN 04/19/2024]]

Clear Photo Three



Photo Four

Photo Four Caption: [SIDE VIEW; PHOTO TAKEN 04/19/2024]]

Clear Photo Four



## **ICC-ES Evaluation Report**

#### **ESR-3560**

Reissued September 2023

This report also contains:

- CBC Supplement

- FBC Supplement

Subject to renewal September 2024

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DIVISION: 08 00 00 - OPENINGS

Section: 08 95 43— Vents/Foundation Flood

**Vents** 

REPORT HOLDER: FLOOD FLAPS®, LLC

**EVALUATION SUBJECT:** 

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



#### 1.0 EVALUATION SCOPE

#### Compliance with the following codes:

- 2021, 2018, 2015, 2012 and 2009 <u>International Building Code<sup>®</sup> (IBC)</u>
- 2021, 2018, 2015, 2012 and 2009 *International Residential Code*® (IRC)

#### **Properties evaluated:**

- Physical operation
- Water flow
- Weathering

#### **2.0 USES**

Flood Flaps® 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® 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 <u>Figure 1</u> 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 (2021, 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

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opening requirement of ASCE/SEI 24, Flood Flaps® 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 <u>Table 1</u>. The sealed series models, designated FFWF, include two rubber flaps for the prevention of air flow. The multi-purpose series, designated FFNF, omits the rubber flaps.

#### 3.4 Natural Ventilation:

Flood Flaps® automatic FV models FFNF12, FFNF08, FFNF05, and FFNF02 have metal screens with ½ inch by ½-inch (6 mm by 6 mm) openings and provide 37 square inches (0.02 m²) of net free opening to supply natural ventilation for under-floor ventilation. Flood Flaps® 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® 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® 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 (2021, 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® 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 squarefeet (20 m²) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located a maximum of12 inches (305 mm) above grade.

#### 5.0 CONDITIONS OF USE:

The Flood Flaps<sup>®</sup> automatic flood vents 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 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® 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 April 2021).

#### 7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-3560) along with the name, registered trademark, or registered logo of the report holder (Flood Flaps®) must be included in the product label.
- **7.2** In addition, the Flood Flaps® models described in this report are identified by a label bearing the model number.
- **7.3** The report holder's contact information is the following:

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

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

MODEL NUMBER	MODEL DESIGNATION	ROUGH OPENING (Width X Height) (inches)	VENT SIZE (W X H X D) (inches)	ENCLOSED AREA COVERAGE <sup>2</sup> (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	$15^{5}/_{8} \times 7^{3}/_{4} \times 5$	220	37

For **SI**: 1 inch = 25.4 mm; 1  $f^{12}$  = 0.093  $m^2$ 

<sup>&</sup>lt;sup>2</sup>The enclosed coverage area in square feet for each model is equivalent to the performance of the same number of square inches of non-engineered openings.

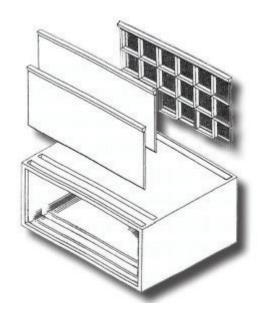


FIGURE 1—FLOOD FLAPS® AUTOMATIC FLOOD VENT

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









FFWF12 FFNF08 FFNF05

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 CBC and CRC Supplement**

Reissued September 2023

This report is subject to renewal September 2024.

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A Subsidiary of the International Code Council®

**DIVISION: 08 00 00—OPENINGS** 

Section: 08 95 43—Vents/Foundation Flood Vents

**REPORT HOLDER:** 

FLOOD FLAPS®, LLC

**EVALUATION SUBJECT:** 

FLOOD FLAPS® AUTOMATIC FLOOD VENTS: MODELS FFWF12; FFWF08; FFWF08; 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, described in ICC-ES evaluation report ESR-3560, has also been evaluated for compliance with the code(s) noted below.

#### Applicable code editions:

- 2022 California Building Code (CBC)
- 2022 California Residential Code (CRC)

For evaluation of applicable Chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

#### 2.0 CONCLUSIONS

#### 2.1 CBC:

The Flood Flaps® automatic flood vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-3560, comply with CBC Chapter 12, provided the design and installation are in accordance with the 2021 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 12 and 16, as applicable.

- 2.1.1 OSHPD: The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.
- 2.1.2 DSA: The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

#### 2.2 CRC:

The Flood Flaps® automatic flood vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-3560, comply with 2021 CRC, provided the design and installation are in accordance with the 2021 International Residential Code® (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued September 2023.





## **ICC-ES Evaluation Report**

### **ESR-3560 FBC Supplement**

Reissued September 2023 This report is subject to renewal September 2024.

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REPORT HOLDER:

FLOOD FLAPS®, 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® automatic flood vents, described in ICC-ES evaluation report ESR-3560, have also been evaluated for compliance with the codes noted below.

#### Applicable code editions:

- 2023 and 2020 Florida Building Code—Building
- 2023 and 2020 Florida Building Code—Residential

#### 2.0 CONCLUSIONS

The Flood Flaps® flood vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-3560, comply with the *Florida Building Code—Building Code—Building Code—Residential*, provided the design requirements are determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-3530 for the 2021 and 2018 *International Building Code®* meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable.

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 61G20-3, 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 evaluation report, reissued September 2023.

