

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

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

ELEVATION CERTIFICATE

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. SECTION A - PROPERTY INFORMATION FOR INSURANCE COMPANY USE A1. Building Owner's Name Policy Number: Michael C. Russell and Karen A. Russell A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Company NAIC Number: 531 Harbor Gate Way City State ZIP Code Florida 34228 Longboat Key A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential A5. Latitude/Longitude: Lat. 27.355479 N Horizontal Datum: NAD 1927 NAD 1983 Long. 82.61193 W 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) N/A sq ft b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade N/A c) Total net area of flood openings in A8.b N/A sq in d) Engineered flood openings? ☐ Yes ☒ No A9. For a building with an attached garage: a) Square footage of attached garage 1362.00 sq ft b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 8 c) Total net area of flood openings in A9.b 296 456.00 sq in SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION B1. NFIP Community Name & Community Number B2. County Name B3. State Longboat Key 125126 Sarasota Florida B6. FIRM Index B4. Map/Panel B5. Suffix **B7. FIRM Panel** B8. Flood B9. Base Flood Elevation(s) Number Date Effective/ Zone(s) (Zone AO, use Base Flood Depth) Revised Date 12115C0126 11-04-2016 11-04-2016 AE 10 B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: FIS Profile | FIRM | Community Determined | Other/Source: 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)? ☐ Yes ☒ No ☐ CBRS ☐ OPA Designation Date:

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2022 IMPORTANT: In these spaces, copy the corresponding information from Section A. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Policy Number: 531 Harbor Gate Way City State ZIP Code Company NAIC Number Longboat Key Florida 34228 SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED) C1. Building elevations are based on: Construction Drawings* Building Under Construction* X Finished Construction *A new Elevation Certificate will be required when construction of the building is complete. C2. 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, AR/AO. Complete Items C2.a-h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters. Benchmark Utilized: NGS BM A 715 Vertical Datum: 7.74 Indicate elevation datum used for the elevations in items a) through h) below. Datum used for building elevations must be the same as that used for the BFE. Check the measurement used. 12.4 × feet meters a) Top of bottom floor (including basement, crawlspace, or enclosure floor) N/A |X | feet meters b) Top of the next higher floor N/A |X | feet meters c) Bottom of the lowest horizontal structural member (V Zones only) X feet 9.3 d) Attached garage (top of slab) meters e) Lowest elevation of machinery or equipment servicing the building 11.4 × feet meters (Describe type of equipment and location in Comments) 7.0 × feet meters f) Lowest adjacent (finished) grade next to building (LAG) 9.0 g) Highest adjacent (finished) grade next to building (HAG) × feet meters h) Lowest adjacent grade at lowest elevation of deck or stairs, including 5.5 × feet meters structural support SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION 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. Were latitude and longitude in Section A provided by a licensed land surveyor? X Yes No Check here if attachments. Certifier's Name License Number BURCH James B. Burchett LS5701 Title President Company Name REG No. 5701 Sampey, Burchett and Knight, Inc. Address 1570 Global Court City State ZIP Code Sarasota Florida 34240 Signature Date Telephone Ext. James B Burchett Digitally signed by James B Burchett Date: 2020.04.17 10:19:01 -04'00' 04-17-2020 (941) 342-0349 Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner. Comments (including type of equipment and location, per C2(e), if applicable) A-9(c) Garage 6 Flood Flap Vents model # FFWFO8, providing 220 sq. ft. of coverage per vent for a total of 1320 sq. ft. of coverage. Storage area 226 sq. ft., finished floor elevation 7.7 with 2 Flood Flap Vents model # FFWFO8, providing 220 sq. ft. of coverage per vent for a total of 440 sq. ft. of coverage. Total of 1,760 sq. ft. of coverage for garage and storage area. C2(e)A/C unit on the left side of residence.

ELEVATION CERTIFICATE

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ELEVATION CERTIFICATE				OMB No. 1660 Expiration Dat	0-0008 e: November 30, 2022
IMPORTANT: In these spaces, copy the corresponding information from Section A.					NCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 531 Harbor Gate Way			Policy Number	er.	
City	State	ZIP Co	de	Company NA	IC Number
Longboat Key	Florida DING ELEVATION IN	34228	CUDVEY NOT	DECITIBED!	
F	OR ZONE AO AND Z	ONE A (WITH	OUT BFE)	(Legonico)	
For Zones AO and A (without BFE), complete complete Sections A, B, and C. For Items E1–enter meters.	Items E1–E5. If the C E4, use natural grade,	ertificate is inten if available. Che	ded to support a eck the measure	a LOMA or LON ement used. In R	IR-F request, Puerto Rico only,
E1. Provide elevation information for the follothe highest adjacent grade (HAG) and the	e lowest adjacent grad	opropriate boxes le (LAG).	to show whether	er the elevation	is above or below
 Top of bottom floor (including baseme crawlspace, or enclosure) is 	***************************************		feet mete	rs above	or Delow the HAG.
 Top of bottom floor (including baseme crawlspace, or enclosure) is 	ent,		∫feet ☐ mete	rs \square above	or Delow the LAG.
E2. For Building Diagrams 6–9 with permane	nt flood openinas prov				
the next higher floor (elevation C2.b in the diagrams) of the building is		Г	Tfeet ☐ mete		or below the HAG.
E3. Attached garage (top of slab) is	- months and the state of the s				
E4. Top of platform of machinery and/or equi	ament	L.	_ feet mete	rs above	or below the HAG.
servicing the building is			feet mete	rs above	or below the HAG.
E5. Zone AO only: If no flood depth number i floodplain management ordinance?	Yes No Ur	nknown. The lo	cal official must	certify this infor	mation in Section G.
The property owner or owner's authorized rep					
community-issued BFE) or Zone AO must sig	n here. The statement	s in Sections A,	B, and E are co	rrect to the best	of my knowledge.
Property Owner or Owner's Authorized Repre	sentative's Name				
Address		City	S	tate	ZIP Code
Signature		Date	т.	Nonhone	
o ignaturo		Date	16	elephone	
Comments			Maria da antida de ava		
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				☐ Check	here if attachments.

FI EVATION CERTIFICATE

	MB No. 1660-0008 piration Date: November 30, 2022
ELEVATION CERTIFICATE ON EX	MB No. 1660-0008 piration Date: November 30, 2022
IMPORTANT: In these spaces, copy the corresponding Information from Section A.	OR INSURANCE COMPANY USE
531 Harbor Gate Way	olicy Number:
City State ZIP Code Code Longboat Key Florida 34228	ompany NAIC Number
SECTION G - COMMUNITY INFORMATION (OPTIONAL)	
The local official who is authorized by law or ordinance to administer the community's floodplain manag Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign be used in Items G8–G10. In Puerto Rico only, enter meters. G1. The information in Section C was taken from other documentation that has been signed and s	low. Check the measurement
engineer, or architect who is authorized by law to certify elevation information. (Indicate the so data in the Comments area below.) G2. A community official completed Section E for a building located in Zone A (without a FEMA-is or Zone AO.	ource and date of the elevation
G3. The following information (Items G4–G10) is provided for community floodplain management	purposes.
	e Certificate of apliance/Occupancy Issued
G7. This permit has been issued for: New Construction Substantial Improvement	
G8. Elevation of as-built lowest floor (including basement) of the building:	meters Datum
G9. BFE or (in Zone AO) depth of flooding at the building site:] meters Datum
	meters Datum
Local Official's Name Title Buicaing Buicaing	Official
Community Name 1 Langboat KEY Telephone 941-316-191	66 6H 2511
Signature Date 4/23/21	
Comments (including type of equipment and location, per C2(e), if applicable)	P
A9.C Charged to 37 NET FREE AREA PER Lap (37x8=296)	+coop
124	
	,

BUILDING PHOTOGRAPHS



See Instructions for Item A6.

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

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE	
Building Street Address (including 531 Harbor Gate Way	Apt., Unit, Suite, and/or Bldg. No.)	or P.O. Route and Box No.	Policy Number:	
City	State	ZIP Code	Company NAIC Number	
Longboat Key	Florida	34228		

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.

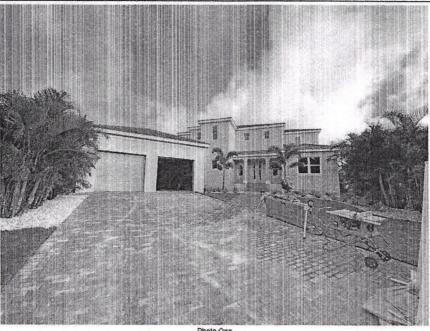


Photo One

Photo One Caption Front View 03-25-2020

Clear Photo One

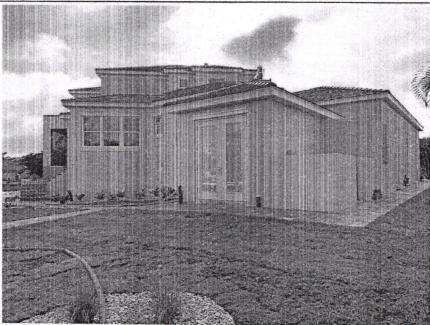


Photo Tw

Photo Two Caption Left Side/Rear View 03-25-2020

Clear Photo Two

BUILDING PHOTOGRAPHS

Continuation Page

OMB No. 1660-0008 Expiration Date: November 30

	se spaces, copy the corresponding information from Section A.	FOR INSURANCE COMPANY USE	
Building Street Add 531 Harbor Gate W	ess (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.	Policy Number:	
City Longboat Key	State ZIP Code Florida 34228	Company NAIC 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.

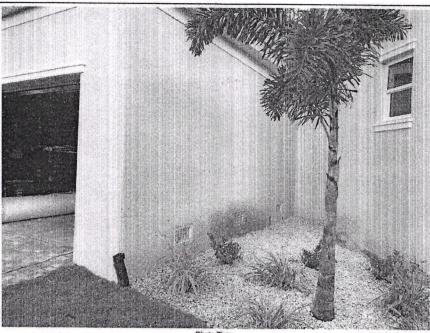


Photo Three

Photo Three Caption Flood vents 03-25-2020

ELEVATION CERTIFICATE

Clear Photo Three

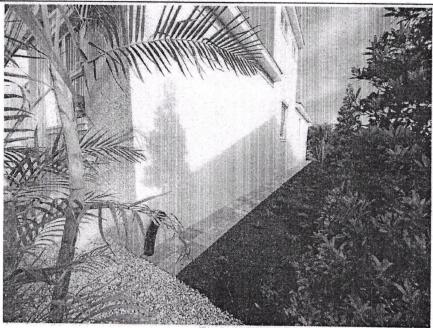


Photo Four Caption Right Side View 03-25-2020

Clear Photo Four



ICC-ES Evaluation Report

ESR-3560

Reissued September 2019

This report is subject to renewal September 2020.

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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: FFWF12: FFWF08: FFWF08: FFWF05: FFWF05

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018, 2015, 2012 and 2009 International Building Code® (IBC)
- 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 Figure 1 for an illustration of the Flood Flaps® automatic FV.

3.2 Engineered Opening:

The Flood Flaps® 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® automatic FVs must be installed in accordance with Section 4.0.

3.3 Flood Vent Series Models:

Flood Flaps® 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® 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 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 (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 square feet (20 m²) 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 Flaps® 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[®] 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 October 2017).

7.0 IDENTIFICATION

7.1 The Flood Flaps[®] 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[®], 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 (ft²)	NET FREE AREA OPENING ¹ (in ²)
FFWF12	Sealed Series	16 x 8	15 ⁵ / ₈ X 7 ³ / ₄ X 12	220	NA
FFNF12	Multi-Purpose	16 x 8	15 ⁵ / ₈ X 7 ³ / ₄ X 12	220	37
FFWF08	Sealed Series	16 x 8	$15^5/_8 \times 7^3/_4 \times 8$	220	NA
FFNF08	Multi-Purpose	16 x 8	$15^5/_8 \times 7^3/_4 \times 8$	220	37
FFWF05	Sealed Series	16 x 8	$15^5/_8 \times 7^3/_4 \times 5$	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^{t2} = 0.093 m^2

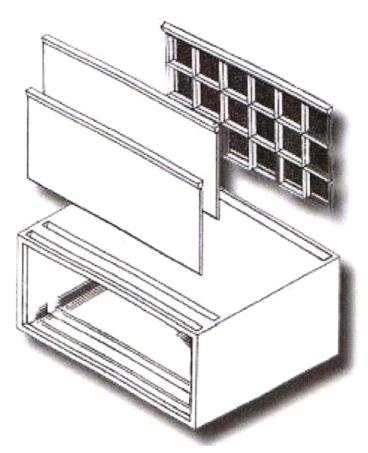
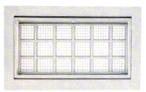


FIGURE 1—FLOOD FLAPS® AUTOMATIC FLOOD VENT

¹For under-floor ventilation only.







FFWF12

FFNF08

FFNF05

FIGURE 2—FLOOD FLAPS® AUTOMATIC FLOOD VENT SERIES MODELS







12" DEPTH

8" DEPTH

5" DEPTH

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.

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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; 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, 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*® 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.

