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

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

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: Spencer Roman						nber:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5 S Clarendon Avenue Company NAIC Number:							NAIC Number:
City			***************************************	State		ZIP Code	
Margate				New Jersey		08402	
A3. Property Desc Block 103.01, Lot		ind Block Numbers, Tax	x Parce	el Number, Legal De	escription, etc.)		
A4. Building Use (e.g., Residen	ntial, Non-Residential, <i>F</i>	4dditior	n, Accessory, etc.)	Residential		
A5. Latitude/Longi	tude: Lat. N	°39°19'53.7"	Long. V	N74°29'41.8"	Horizontal Datum	: NAD	1927 X NAD 1983
A6. Attach at leas	2 photograp	hs of the building if the	Certific	cate is being used t	o obtain flood insura	ince.	
A7. Building Diagra	am Number	8					
A8. For a building	with a crawls	pace or enclosure(s):					
a) Square foo	tage of crawl	space or enclosure(s)		1,160 sq ft			
b) Number of	permanent flo	ood openings in the cra	awlspac	ce or enclosure(s) w	vithin 1.0 foot above	adjacent gr	rade 6
		penings in A8.b 1,3		sq in		-	
d) Engineered	flood openin	ngs? ⊠ Yes □ No	0				
A9. For a building	with an attach	ned garage:					
a) Square foot	tage of attach	ned garage0		sq ft			
b) Number of	permanent flo	ood openings in the atta	ached o	garage within 1.0 fo	ot above adiacent o	rade	. 0
		penings in A9,b				***************************************	
		gs? Yes 🗵 No		_ ~~			
······································	SE	CTION B - FLOOD IN	ISURA	NCE RATE MAP	(FIRM) INFORMAT		
B1. NFIP Communi				B2. County Name			B3. State
Margate City 34530	4			Atlantic			New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Ef	I IRM Panel ffective/ evised Date	B8. Flood Zone(s)	(Zor	se Flood Elevation(s) ne AO, use Base
34001C 0453	F	08/28/2018	08/28		AE	10.00	od Depth)
		Base Flood Elevation (E			pth entered in Item	B9:	
B11. Indicate eleva	tion datum us	sed for BFE in Item B9:	: 🔲 N	 GVD 1929 ⊠ NA	.VD 1988	er/Source:	
B12 Is the building	located in a	Coastal Barrier Resour	rces Sv	retem (CRPS) area	or Othonwico Protoc	tod Aron (C	
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes No Designation Date:							
200igilation 2		⊔ с	DKO	☐ OPA			
# 10 m							

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corresponding	FOR INSURANCE COMPANY USE				
Building Street Address (including Apt., Unit, Suite, and/or 5 S Clarendon Avenue	Policy Number:				
City State ZIP Code Margate New Jersey 08402			Company NAIC Number		
SECTION C – BUILDING EL	EVATION INFORMA	TION (SURVEY RI	EQUIRED)		
C1. Building elevations are based on: Construction	٠ ـــ	ilding Under Constru	uction*		
*A new Elevation Certificate will be required when c		•			
C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), Complete Items C2.a–h below according to the buil Benchmark Utilized: Local BM	, VE, V1–V30, V (with E Iding diagram specified Vertical Datum	in Item A7. In Puert	AE, AR/A1–A30, AR/AH, AR/AO. o Rico only, enter meters.		
Indicate elevation datum used for the elevations in it	to be a second to the second to the second				
NGVD 1929 NAVD 1988 Other/s		JW.			
Datum used for building elevations must be the same		BFE.	- Andrew Control of the Control of t		
To the state of th	ata assas da s	. 77	Check the measurement used.		
a) Top of bottom floor (including basement, crawlsp	pace, or enclosure floor				
b) Top of the next higher floor		13. <u>0</u>	torond hand		
c) Bottom of the lowest horizontal structural member	er (V Zones only)	N/A.			
d) Attached garage (top of slab)		N/A			
e) Lowest elevation of machinery or equipment sen (Describe type of equipment and location in Com	vicing the building nments)	13. 0			
f) Lowest adjacent (finished) grade next to building	յ (LAG)	7. <u>1</u>	X feet meters		
g) Highest adjacent (finished) grade next to building	g (HAG)	<u>7</u> . <u>3</u>	x feet meters		
h) Lowest adjacent grade at lowest elevation of dec structural support	ck or stairs, including	<u> </u>	X feet meters		
SECTION D - SURVEYOR,	, ENGINEER, OR AR	CHITECT CERTIFI	CATION		
This certification is to be signed and sealed by a land sur I certify that the information on this Certificate represents statement may be punishable by fine or imprisonment un	s my best efforts to inte	rpret the data availa	law to certify elevation information. ble. I understand that any false		
Were latitude and longitude in Section A provided by a lice	•				
Certifier's Name	License Number				
James R. Boney, PLS	31264		<u> </u>		
Title Professional Land Surveyor					
Company Name			Place		
James R. Boney & Associates, LLC			Seal Seal Here		
Address 13 Stone Mill Court					
City Egg Harbor Twp	State New Jersey	ZIP Code 08234			
Signature	Date 08/22/2019	Telephone (609) 788-8013			
Copy all pages of this Elevation Certificate and all attachme	ents for (1) community o	fficial, (2) insurance a	agent/company, and (3) building owner.		
Comments (including type of equipment and location, per C2(e), if applicable) Two and a half story frame dwelling on crawlspace. The vents are Flood Flaps Model FFWF08. (ICC Report attached.) A/C Unit outside on platform. All mechanicals are above the FF (13.0)					

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the correspond	FOR INSURANCE COMPANY USE					
Building Street Address (including Apt., Unit, Suite, and 5 S Clarendon Avenue	Policy Number:					
		P Code 3402	Company NAIC Number			
SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)						
For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.						
E1. 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		_	s above or below the HAG.			
 Top of bottom floor (including basement, crawlspace, or enclosure) is 		feet meter	s 🔲 above or 🗌 below the LAG.			
E2. For Building Diagrams 6–9 with permanent flood of the next higher floor (elevation C2.b in	ppenings provided in Sec	tion A Items 8 and/or	9 (see pages 1–2 of Instructions),			
the diagrams) of the building is		_				
E3. Attached garage (top of slab) is E4. Top of platform of machinery and/or equipment	•	_	s above or below the HAG.			
servicing the building is		_				
E5. Zone AO only: If no flood depth number is available floodplain management ordinance? Yes						
SECTION F - PROPERTY OW	NER (OR OWNER'S RE	PRESENTATIVE) CE	RTIFICATION			
The property owner or owner's authorized representation community-issued BFE) or Zone AO must sign here. The property owner is a community-issued BFE.	ve who completes Section he statements in Section	ons A, B, and E for Zo s A, B, and E are cor	ne A (without a FEMA-issued or rect to the best of my knowledge.			
Property Owner or Owner's Authorized Representative	's Name					
Address	City	Sta	ate ZIP Code			
Signature	Date	Те	lephone			
Comments						
		¥				
			☐ Check here if attachments.			

ELEVATION CERTIFICATE

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

MPORTANT: 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 Bos 5 S Clarendon Avenue	x No. Policy Number:						
City State ZIP Code Margate New Jersey 08402	Company NAIC Number						
SECTION G - COMMUNITY INFORMATION (OPTIONAL)							
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.							
G1. The information in Section C was taken from other documentation that has been engineer, or architect who is authorized by law to certify elevation information. (In data in the Comments area below.)	dicate the source and date of the elevation						
G2. A community official completed Section E for a building located in Zone A (without or Zone AO.	ut a FEMA-issued or community-issued BFE)						
G3. The following information (Items G4–G10) is provided for community floodplain m	nanagement purposes.						
G4. Permit Number G5. Date Permit Issued	G6. Date Certificate of Compliance/Occupancy Issued						
G7. This permit has been issued for: New Construction Substantial Improve	ment						
G8. Elevation of as-built lowest floor (including basement) of the building:	feet meters Datum						
G9. BFE or (in Zone AO) depth of flooding at the building site:	feet meters Datum						
G10. Community's design flood elevation:	feet meters Datum						
Local Official's Name Title	CFM						
Community Name Telephone Manbara	609-822-1974						
Signature Date	(FM 609-822-1914 9/10/15						
Comments (including type of equipment and location, per C2(e), if applicable)							
	Check here if attachments.						

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

See Instructions for Item A6.

OMB No. 1660-0008

Expiration Date: November 30, 2018

IMPORTANT: In these spaces, cop	FOR INSURANCE COMPANY USE		
Building Street Address (including A 5 S Clarendon Avenue	Policy Number:		
City	State	ZIP Code	Company NAIC Number
Margate	New Jersey	08402	

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 08/21/2019



Photo Two

Photo Two Caption Rear 08/21/19

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

Continuation Page

OMB No. 1660-0008

Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy	FOR INSURANCE COMPANY USE		
Building Street Address (including Ap 5 S Clarendon Avenue	Policy Number:		
City	State	ZIP Code	Company NAIC Number
Margate	New Jersey	08402	

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.

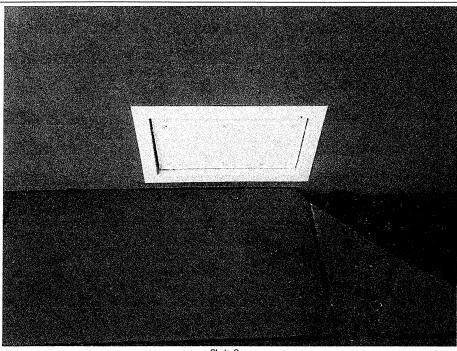


Photo One

Photo One Caption Flood Flap (typical one of six) 08-21-19

Photo Two

Photo Two



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ICC-ES Evaluation Report

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ESR-3560

Reissued 09/2018 This report is subject to renewal 09/2019.

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



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

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ICC-ES Evaluation Report

ESR-3560

Reissued September 2018

This report is subject to renewal September 2019.

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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 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 $^{\oplus}$ 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^2 = 0.093 m^2

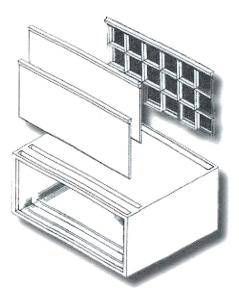


FIGURE 1—FLOOD FLAPS® AUTOMATIC FLOOD VENT

¹For under-floor ventilation only.

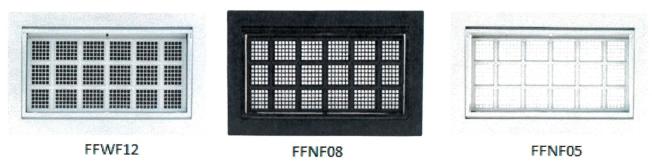


FIGURE 2—FLOOD FLAPS® AUTOMATIC FLOOD VENT SERIES MODELS



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



ICC-ES Evaluation Report

ESR-3560 FBC Supplement

Reissued September 2018

This report is subject to renewal September 2019.

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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 2018.

