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 INSUF	RANCE COMPANY USE	
A1. Building Owner's Name Pat Decker					Policy Numb	per:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. #105 North Rumson Avenue						Company N	AIC Number:
City City of Margate				State New Jer	-	ZIP Code 08402	
A3. Property Descrip Block 318 Lot 10	otion (Lot an	nd Block Numbers, Ta	x Parce	l Number, Leg	gal Description, etc	c.)	
A4. Building Use (e.g	g., Resident	tial, Non-Residential,	Addition	, Accessory,	etc.) Residentia	al	
A5. Latitude/Longitud	de: Lat. <u>39</u> .	.3270	Long7	74.5099	Horizonta	l Datum: 🔲 NAD 1	927 🗵 NAD 1983
A6. Attach at least 2	photograph	ns of the building if the	e Certific	ate is being ι	used to obtain floor	d insurance.	
A7. Building Diagram	n Number _	7					
A8. For a building wi	ith a crawlsp	pace or enclosure(s):					
a) Square footag	ge of crawls	space or enclosure(s)			684.00 sq ft		
b) Number of per	rmanent floo	od openings in the cra	awlspac	e or enclosure	e(s) within 1.0 foot	above adjacent gra	ade <u>5</u>
c) Total net area	a of flood ope	enings in A8.b	1	1100.00 sq ir	1		
d) Engineered flo	lood opening	gs? 🗵 Yes 🗌 N	10				
A9. For a building with	th an attache	ed garage:					
a) Square footag	ge of attache	ed garage		0.00 sq ft	•		
b) Number of per	rmanent floo	od openings in the att	ached g	arage within	1.0 foot above adj	acent grade 0	
c) Total net area	of flood ope	enings in A9.b		0.00 sq	in		
d) Engineered flo	ood opening	gs? 🗌 Yes 🕱 N	lo				
	SEC	CTION B - FLOOD I	NSURA	NCE RATE	MAP (FIRM) INF	ORMATION	
B1. NFIP Community Name & Community Number B2. County Name B3. State						B3. State	
CITY OF MARGATE	& 3453	04		ATLANTIC	COUNTY		New Jersey
B4. Map/Panel E Number	B5. Suffix	B6. FIRM Index Date	Effe	RM Panel ective/ vised Date	B8. Flood Zone(s)	B9. Base Flood E (Zone AO, use	levation(s) e Base Flood Depth)
34001C0434 F	F	08-28-2018	08-28-2		AE	8	
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:							
FIS Profile X 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							
Designation Da	ıte:		CBRS	☐ OPA			

ELEVATION CERTIFICATE

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 Apt., Unit, Suite, and/or #105 North Rumson Avenue	Bldg. No.) or P.O. Ro	ite and Box No.	Policy Number:		
City Star City of Margate Nev	te ZIP v Jersey 084	Code 02	Company NAIC Number		
SECTION C – BUILDING EL	EVATION INFORMA	TION (SURVEY RE	EQUIRED)		
*A new Elevation Certificate will be required when co	*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.				
Benchmark Utilized: private	Vertical Datum	NAVD88			
Indicate elevation datum used for the elevations in it NGVD 1929 X NAVD 1988 Other/S Datum used for building elevations must be the sam	Source:				
a) Top of bottom floor (including basement, crawlsp	ace, or enclosure floor)	Check the measurement used. 7.9		
b) Top of the next higher floor			12.8 🕱 feet 🗌 meters		
c) Bottom of the lowest horizontal structural membe	er (V Zones only)		N/A ⋉ feet meters		
d) Attached garage (top of slab)	,		N/A 🗵 feet 🗌 meters		
 e) Lowest elevation of machinery or equipment sen (Describe type of equipment and location in Com 	vicing the building ments)	· · · · · · · · · · · · · · · · · · ·	12.9 🗵 feet 🗌 meters		
f) Lowest adjacent (finished) grade next to building	(LAG)		7.5 🗷 feet 🗌 meters		
g) Highest adjacent (finished) grade next to building	(HAG)	-	8.0 🔀 feet 🗌 meters		
 h) Lowest adjacent grade at lowest elevation of dec structural support 	k or stairs, including	***************************************	7.2 🗵 feet 🗌 meters		
SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION					
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	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 lid	censed land surveyor?	⊠Yes □ No	○ Check here if attachments.		
Certifier's Name Paul M. Koelling, PLS, CFM	License Number NJ24GS 04328800				
Title Professional Land Surveyor			Place		
Company Name Paul Koelling & Associates NJ C.O.A. 24GA28256300			Seal		
	ey@comcast.net		Here		
City Linwood	State New Jersey	ZIP Code 08221			
Signature / and /	Date 3-/7-A \	Telephone (609) 927-0279	Ext.		
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) *A8 & A9.) Flood Flaps Model #FFWF08 engineered for 220 square inches of net area each(Municipality and NFIP please see sketch for flood vent compliancySurveyor does not guaranty compliancy due to vague Elevation Certificate Instructions combined with varying interpretations of said Instructions between Municipalities)					
***C2a.) enclosure (see sketch)					
****C2e.) furnace (elev 12.9)					

ELEVATION CERTIFICATE

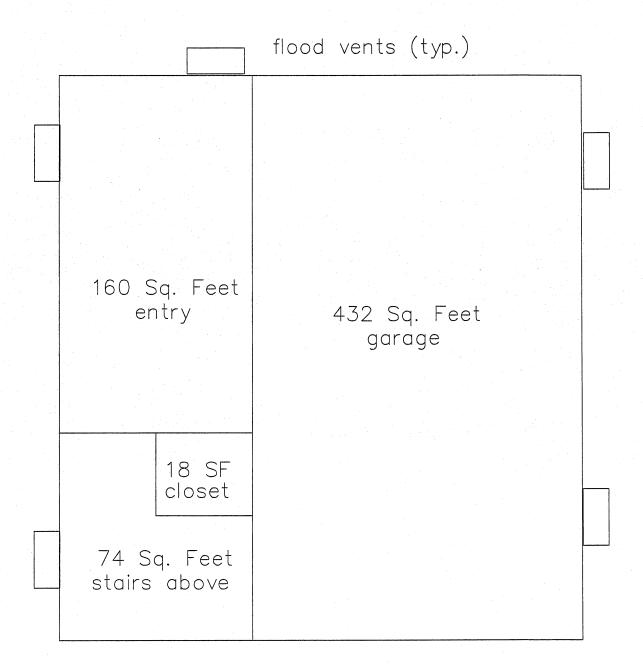
OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the correspondir	ng information from Se	ction A.	FOR INSURANCE COMPANY USE			
Building Street Address (including Apt., Unit, Suite, and/ #105 North Rumson Avenue	or Bidg. No.) or P.O. Ro	ute and Box No.	Policy Number:			
	ate ZIF ew Jersey 084	Code 402	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						
SECTION E DEODERTY OWN	ED (OD OWNED)S DEF	DECENTATIVE) C	EDTIFICATION			
SECTION F – PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.						
Property Owner or Owner's Authorized Representative's	Name					
Address	City	Si	tate ZIP Code			
Signature	Date	Тє	elephone			
Comments						

ELEVATION CERTIFICATE

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 Apt., Unit, S #105 North Rumson Avenue	uite, and/or Bldg. N	lo.) or P.O. Route and Box		Policy Number:
City	State	ZIP Code		Company NAIC Number
City of Margate	New Jersey			Company 14/110 Number
SECTION	ON G - COMMUNI	TY INFORMATION (OPTIO	ONAL)	
The local official who is authorized by law or or Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, er	n Certificate. Comple	ter the community's floodp ete the applicable item(s) a	olain mana and sign b	agement ordinance can complete pelow. Check the measurement
G1. The information in Section C was tak engineer, or architect who is authoriz data in the Comments area below.)	en from other docu ed by law to certify	mentation that has been si elevation information. (Ind	igned and dicate the	I sealed by a licensed surveyor, source and date of the elevation
G2. A community official completed Sect or Zone AO.	ion E for a building	located in Zone A (without	a FEMA-	issued or community-issued BFE)
G3. The following information (Items G4-	-G10) is provided fo	or community floodplain ma	anagemer	nt purposes.
G4. Permit Number	G5. Date Permit	Issued		ate Certificate of ompliance/Occupancy Issued
G7. This permit has been issued for:	New Construction	n 🗌 Substantial Improvem	nent	
G8. Elevation of as-built lowest floor (including of the building:	g basement) –		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	n Calmati	Title	CF	-M
Community Name MANO	n Calanto	Telephone	309	-811-1914
Signature <i>Oul</i>	7/	Date		03/18/21
Comments (including type of equipment and loc	cation, per C2(e), if			
				Check here if attachments.





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ICC-ES Report

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ESR-3560

Reissued 09/2015 This report is subject to renewal 09/2017.

DIVISION: 08 00 00—OPENINGS

SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

REPORT HOLDER:

FLOOD FLAPS®, LLC

POST OFFICE BOX 1003
ISLE OF PALMS, SOUTH CAROLINA 29451

EVALUATION SUBJECT:

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



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ICC-ES Evaluation Report

ESR-3560

Reissued September 2015 Revised June 2017

This report is subject to renewal September 2017.

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DIVISION: 08 00 00—OPENINGS

Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

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

EVALUATION SUBJECT:

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

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2015, 2012 and 2009 International Building Code® (IBC)
- 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 [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 [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.

7.0 IDENTIFICATION

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).

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; $1 f^{12} = 0.093 m^2$

¹For under-floor ventilation only.

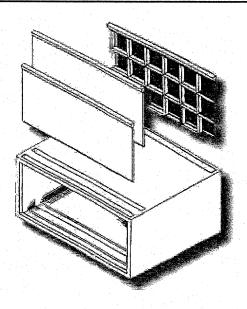


FIGURE 1—FLOOD FLAPS® AUTOMATIC FLOOD VENT

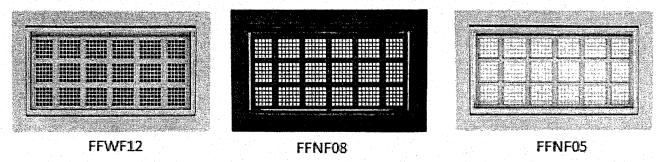


FIGURE 2—FLOOD FLAPS® AUTOMATIC FLOOD VENT SERIES MODELS

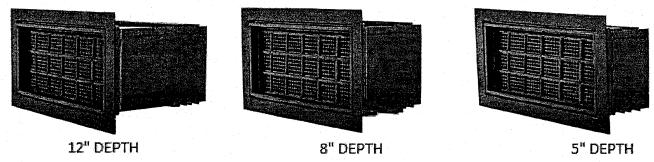


FIGURE 3—FLOOD FLAPS® AUTOMATIC FLOOD VENTS MULTIPLE DEPTH OFFERINGS



ICC-ES Evaluation Report

ESR-3560 FBC Supplement

Reissued September 2015 Revised June 2017 This report is subject to renewal September 2017.

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DIVISION: 08 00 00—OPENINGS

Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

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

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:

- 2014 Florida Building Code—Building
- 2014 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 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, issued September 2015 and revised June 2017.



Building Photographs

	See Instructions for	r Item A6.	For Insurance Company Use:
Building Street Address (inclu #105 N. Rumson Ave	Policy Number		
City	State	ZIP Code	Company NAIC Number
Margate	NJ	08402	

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two 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." If submitting more photographs than will fit on this page, use the Continuation Page on the reverse.





Front View – Date of Photograph: (See Photo Stamp)

Rear View – Date of Photograph: (See Photo Stamp)





Vent View – Date of Photograph: (See Photo Stamp)

Left Side View – Date of Photograph: (See Photo Stamp)