# 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.

JUL 07 2017

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:

BRET FISHER					
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Company NAIC Number:					
104 NORTH MONROE AVENUE		a a			
City State CITY OF MARGATE New Jersey	ZIP Cod 08402	le			
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, Block 331 LOT 402	, etc.)				
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESID	ENTIAL CONDOM	INIUM			
A5. Latitude/Longitude: Lat. 39.32172 Long74.5187 Horizon	ntal Datum: 🔲 NA	AD 1927 🗵 NAD 1983			
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain f	lood insurance.	EC.			
A7. Building Diagram Number6					
A8. For a building with a crawlspace or enclosure(s):		a			
a) Square footage of crawlspace or enclosure(s)sq ft					
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 to	foot above adjacen	t grade10			
c) Total net area of flood openings in A8.bsq in					
d) Engineered flood openings? X Yes No					
A9. For a building with an attached garage:					
a) Square footage of attached garage sq ft		æ.			
b) Number of permanent flood openings in the attached garage within 1.0 foot above	adjacent grade	0			
c) Total net area of flood openings in A9.b 0 sq in					
d) Engineered flood openings?	*				
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) I	NFORMATION				
B1. NFIP Community Name & Community Number B2. County Name		B3. State			
CITY OF MARGATE & 345304 ATLANTIC COUNTY		New Jersey			
B4. Map/Panel Number       B5. Suffix Date       B6. FIRM Index Date       B7. FIRM Panel Effective/ Revised Date       B8. Floor Effective/ Revised Date         345304/0001       C       10/18/1983       10/18/1983       A8**		Base Flood Elevation(s) (Zone AO, use Base Flood Depth)			
0.000 11000					
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 Determined Other/Source:					
☐ FIS Profile ☒ FIRM ☐ Community Determined ☐ Other/Source:	red in Item B9:	(1)			
☐ FIS Profile ☒ FIRM ☐ Community Determined ☐ Other/Source:  B11. Indicate elevation datum used for BFE in Item B9: ☒ NGVD 1929 ☐ NAVD 1988	ī	ce:			
	3 Other/Sour				
B11. Indicate elevation datum used for BFE in Item B9: X NGVD 1929 NAVD 1988	3 Other/Sour				

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IMPO	RTANT: In these spaces, copy the corresponding	FOR INSURANCE COMPANY USE			
1	ng Street Address (including Apt., Unit, Suite, and/or IORTH MONROE AVENUE	Bldg. No.) or P.O. Rou	te and Box No.	Policy Number:	
City CITY	Stat OF MARGATE New	e ZIP 0 v Jersey 0840		Company NAIC Number	
	SECTION C – BUILDING ELI	EVATION INFORMAT	ION (SURVEY R	EQUIRED)	
C1.	Building elevations are based on: Constructio	n Drawings*	ling Under Constru	uction* X Finished Construction	
	*A new Elevation Certificate will be required when co		- i		
	Elevations – Zones A1–A30, AE, AH, A (with BFE), Complete Items C2.a–h below according to the build Benchmark Utilized: private	VE, V1–V30, V (with BF ling diagram specified in Vertical Datum:	item A7. In Puer	AE, AR/A1–A30, AR/AH, AR/AO. co Rico only, enter meters.	
	Indicate elevation datum used for the elevations in it  ✓ NGVD 1929 ☐ NAVD 1988 ☐ Other/S		٧.		
	Datum used for building elevations must be the same		FE.		
			6.4	Check the measurement used.	
	a) Top of bottom floor (including basement, crawlsp	ace, or enclosure floor)	14. 5	X feet meters	
	b) Top of the next higher floor	r () / Zanaa ankı)	N/A	X feet meters	
	<ul><li>c) Bottom of the lowest horizontal structural membe</li><li>d) Attached garage (top of slab)</li></ul>	r (v Zories only)	N/A	X feet meters meters	
	E) Lowest elevation of machinery or equipment serv (Describe type of equipment and location in Com	ricing the building	13. 6	X feet meters	
	f) Lowest adjacent (finished) grade next to building		5, 6	X feet meters	
3	g) Highest adjacent (finished) grade next to building		6.4	X feet  meters	
	h) Lowest adjacent grade at lowest elevation of dec structural support		6.0		
	Service Control Contro	ENGINEER OR ARC	HITECT CERTIE	ICATION	
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.					
	e latitude and longitude in Section A provided by a lic			X Check here if attachments.	
	fier's Name	License Number	WORK TO THE TOTAL THE TOTAL TO THE TOTAL TOT		
	M. Koelling, PLS, CFM	NJ24GS 04328800			
Title Lice	nsed Land Surveyor				
	pany Name Koelling & Associates, LLC NJ C.O.A. No. 24GA2	8256300		Place Seal	
Addr 2161	ess Shore Road			Here	
City		State	ZIP Code	-	
Linw	ood	New Jersey	08221		
Sign		Date 7	Telephone (609) 927-0279		
Сору	all pages of this Elevation Certificate and all attachmen	nts for (1) community off	icial, (2) insurance	agent/company, and (3) building owner.	
Comments (including type of equipment and location, per C2(e), if applicable)  *A8.) USA flood vents model #FOSS engineered for 252 sq. inches of net area each (see attached)  **B8 & B9.) FEMA Pre-FIRM Zone "AE"Base Flood Elevation 9 ft. (NAVD88) converted = 10.3 ft. (NGVD29)  ***C2a.) enclosure with part wall, garages, entrances, storage rooms (elev 6.4)elevator pits (elev 4.4)  ****C2e.) exterior air unit (elev 13.6)electrical outlets (elev 12.5)					
				to a company from the control of the	

### **ELEVATION CERTIFICATE**

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IMPORTANT: In these spaces, copy the correspond	FOR INSURANCE COMPANY USE			
Building Street Address (including Apt., Unit, Suite, an 104 NORTH MONROE AVENUE	,		Policy Number:	
- C1000 € 0		ZIP Code 18402	Company NAIC Number	
SECTION E – BUILDING EL FOR ZON	LEVATION INFORMAT IE AO AND ZONE A (V	TION (SURVEY NOT NITHOUT BFE)	REQUIRED)	
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.				
<ul><li>E1. Provide elevation information for the following and the highest adjacent grade (HAG) and the lowest</li><li>a) Top of bottom floor (including basement,</li></ul>		ooxes to show whether	the elevation is above or below	
crawlspace, or enclosure) is b) Top of bottom floor (including basement,		_ feet meters	s above or below the HAG.	
crawlspace, or enclosure) is  E2. For Building Diagrams 6–9 with permanent flood of	econings provided in Sec			
the next higher floor (elevation C2.b in the diagrams) of the building is				
E3. Attached garage (top of slab) is			s above or below the HAG.	
E4. Top of platform of machinery and/or equipment servicing the building is	×		s above or below the HAG.	
E5. Zone AO only: If no flood depth number is availab floodplain management ordinance? Yes			cordance with the community's certify this information in Section G.	
SECTION F – PROPERTY OW	NER (OR OWNER'S RE	PRESENTATIVE) CE	RTIFICATION	
The property owner or owner's authorized representati community-issued BFE) or Zone AO must sign here. T	ve who completes Section he statements in Section	ons A, B, and E for Zon ns A, B, and E are corr	ne A (without a FEMA-issued or ect to the best of my knowledge.	
Property Owner or Owner's Authorized Representative	's Name			
Address	City	Sta	ate ZIP Code	
Signature	Date	Tel	ephone	
Comments		-		
			÷	
		47		
			Check here if attachments.	

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MPORTANT: In these spaces, copy the corresponding information from Section A. FOR INSURANCE COMPANY US				
Building Street Address (including Apt., Unit, S 104 NORTH MONROE AVENUE	x No.	Policy Number:		
City CITY OF MARGATE	State ZIP Code New Jersey 08402		Company NAIC Number	
SECTION	ON G – COMMUNITY INFORMATION (OPT	IONAL)	3	
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 signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)				
G2. A community official completed Sector Zone AO.	ion E for a building located in Zone A (withou	ut a FEMA-	issued or community-issued BFE)	
G3. The following information (Items G4-	-G10) is provided for community floodplain n	nanagemer	nt purposes.	
G4. Permit Number	G5. Date Permit Issued		nte Certificate of mpliance/Occupancy Issued	
G7. This permit has been issued for:	☐ New Construction ☐ Substantial Improve	ment	,	
G8. Elevation of as-built lowest floor (includin of the building:	g basement)	feet [	meters	
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			
Community Name	Telephone			
Signature	Date			
Comments (including type of equipment and location, per C2(e), if applicable)				
		**	*	
			÷	
			Check here if attachments.	



Most Widely Accepted and Trusted

# **ICC-ES Evaluation Report**

**ESR-3907** 

Issued October 2016

This report is subject to renewel October 2017.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 08 00 00-OPENINGS

Section: 08 95 43-Vents/Foundation Flood Vents

REPORT HOLDER:

USA FLOOD AIR VENTS, LTD.
63 PUTNAM STREET
SUITE 202
SARATOGA SPRINGS, NEW YORK 12866
(631) 269-1872
www.usafloodairvents.com
info@usafloodalrvents.com

**EVALUATION SUBJECT:** 

USA FLOOD AIR VENTS: MODELS FOSS; FASS; FOAL; FAAL; ROAL

#### 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2015 and 2012 International Building Code® (IBC)
- 2015 and 2012 International Residential Code® (IRC)

#### Property evaluated:

- Physical operation
- Water flow
- Ventilation

#### 2.0 USES

The USA Flood Air 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:

USA Flood Air Vents are engineered mechanically operated flood vents that automatically allow flood waters to enter and exit enclosed areas. The vents are constructed of stainless steel or aluminum. 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. See Table 1 for vent sizes and Figure 1 for an illustration of the vents.

3.1.1 FOSS: The FOSS is constructed of stainless steel and has a solid flap to prevent the free flow of air into the under-floor space.

- **3.1.2 FASS:** The FASS is constructed of stainless steel and has a flap with  $\frac{1}{4}$  inch (6 mm) diameter holes to allow for the ventilation of under-floor spaces.
- 3.1.3 FOAL: The FOAL is constructed of aluminum and has a solid flap to prevent the free flow of air into the under-floor space.
- 3.1.4 FAAL: The FAAL is constructed of aluminum and has a flap with <sup>1</sup>/<sub>4</sub> inch (6 mm) diameter holes to allow for the ventilation of under-floor spaces.
- 3.1.5 ROAL: The ROAL is constructed of aluminum and has a solid flap to prevent the free flow of air into the under-floor space. It is intended for retrofit applications.

### 3.2 Engineered Opening:

The USA Flood Air Vents flood vents comply with the design principle noted in Section 2.7.2.2 of ASCE/SEI 24-14 (Section 2.8.2.2 of ASCE/SEI 24-05) 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, USA Flood Air Vents flood vents must be installed in accordance with Section 4.0.

#### 3.3 Ventilation:

USA Flood Air Vents models FASS and FAAL have 1/4 inch (6 mm) diameter holes in the flap to supply natural ventilation for under-floor ventilation. See Table 1 for the net free area provided for under-floor ventilation.

#### 4.0 DESIGN AND INSTALLATION

USA Flood Air Vents flood vents are designed to be installed into walls or doors of existing or new construction. Installation of the flood vents must be in accordance with the manufacturer's instructions, the applicable code and this report. USA Flood Air Vents flood vents can be installed in wood, masonry and concrete walls. In order to comply with the engineered opening design principle noted in Section 2.7.2.2 of ASCE/SEI 24-14 (Section 2.6.2.2 of ASCE/SEI 24-05), the USA Flood Air Vents flood vents must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one flood vent per the amount of enclosed area coverage noted in Table 1.
- Below the base flood elevation.
- With the bottom of the flood vent located a maximum of 12 inches (305 mm) above grade.



#### 5.0 CONDITIONS OF USE

The USA Flood Air Vents described in this report complies with, or is a suitable alternative to what is specified in those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The USA Flood Air Vents flood vents 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 USA Flood Air Vents flood vents 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 USA Flood Air Vents models recognized in this report are identified by a label bearing the manufacturer's name, the model designation, and the evaluation report number (ESR-3907).

TABLE 1-USA FLOOD AIR VENTS

MODEL DESIGNATION	VENT SIZE (Width x Height) (In)	ROUGH OPENING SIZE (Width x Height) (in)	ENCLOSED AREA COVERAGE (ft²)	FLAP NET FREE AREA <sup>1</sup> (in <sup>2</sup> )
FQ\$\$	18 x 10	$15^{1}/_{2} \times 7^{1}/_{2}$	252	None
FASS	18 x 10	15 <sup>1</sup> / <sub>2</sub> × 7 <sup>1</sup> / <sub>2</sub>	252	28
FOAL	18 x 10	151/2 x 71/2	252	None
FAAL	18 x 10	$15^{1}/_{2} \times 7^{1}/_{2}$	252	37
ROAL	16³/ <sub>8</sub> x 10	13'/ <sub>8</sub> x 7'/ <sub>2</sub>	224	None

For SI: 1 inch = 25.4 mm

<sup>&</sup>lt;sup>1</sup>Net free area in the vent flap for under-floor space ventilation.

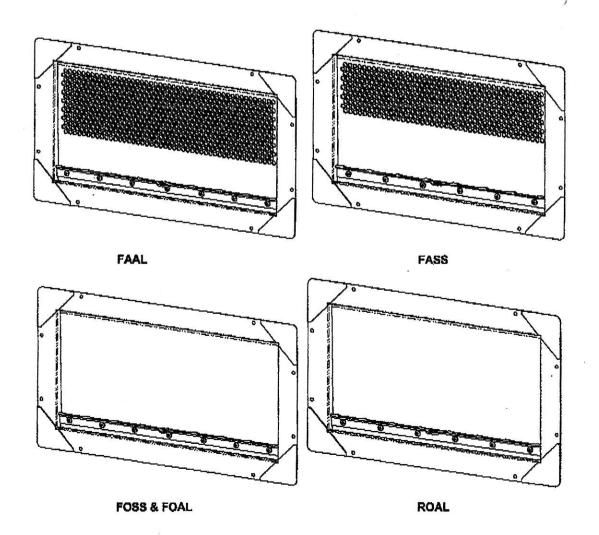


FIGURE 1-USA FLOOD AIR VENTS

# **Building Photographs**

	For Insurance Company Use:		
Building Street Address (included 104 North Monroe Ave.	Policy Number		
City	State	ZIP Code	Company NAIC Number
Margate	NJ	08402	# 29

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)





Right Side View - Date of Photograph: (See Photo Stamp)

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