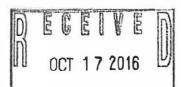
# U.S. DEPARTMENT OF HOMELAND SECURITY Feseral Emergency Management Agency tional Flood Insurance Program



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 a	gent/company, and (3) building owner.	
SECTION A - PROPERTY INFORMATION	FOR INSURANCE COMPANY USE	
A1. Building Owner's Name	Policy Number:	
<ul> <li>The Kalen's</li> <li>A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.</li> <li>18 N. Osborne Ave.</li> </ul>	Company NAIC Number:	
City State	ZIP Code	
CITY OF MARGATE New Jersey	08402	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Block 216 Lot 11		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL		
A5. Latitude/Longitude: Lat. N 39.3275 Long. W 074.5081 Horizontal Datur	m: 🗌 NAD 1927 🛛 NAD 1983	
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insur	rance.	
A7. Building Diagram Number 6		
A8. For a building with a crawlspace or enclosure(s):	6	
a) Square footage of crawlspace or enclosure(s) 1,486 sq ft	<u>F.</u>	
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above	e adjacent grade 8	
c) Total net area of flood openings in A8.b 2,016 sq in		
d) Engineered flood openings? 🖾 Yes 🗌 No		
A9. For a building with an attached garage:		
a) Square footage of attached garage sq ft		
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent	grade0	
c) Total net area of flood openings in A9.b0 sq in		
d) Engineered flood openings?  Yes X No		
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORM	ATION	
B1. NFIP Community Name & Community NumberB2. County NameCITY OF MARGATE & 345304ATLANTIC COUNTY	B3. State New Jersey	
B4. Map/Panel NumberB5. SuffixB6. FIRM Index DateB7. FIRM Panel Effective/ Revised DateB8. Flood Zone(s345304/0001C10/18/1983A8**	s) B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 10**	
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood depth entered in Iter         Image: Display the source of the Base Flood Elevation (BFE) data or base flood data or base flood data or base flood elevation (BFE) data or base flood data or base flood elevation (BFE) data or base flood elevation	m B9: 	
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Prot Designation Date: CBRS OPA	ected Area (OPA)?  Yes X No	

ELEVATION CERTIFICATE			OMB No. 1660-0008 Expiration Date: November 30, 2018	
IMPORTANT: In these spaces, copy	FOR INSURANCE COMPANY USE			
3uilding Street Address (including Apt 18 N. Osborne Ave.	., Unit, Suite, and/or Bldg. No.) or P.C	D. Route and Box No.	Policy Number:	
City CITY OF MARGATE	State New Jersey	ZIP Code 08402	Company NAIC Number	
SECTION	C – BUILDING ELEVATION INFO	RMATION (SURVEY R	EQUIRED)	
C2. Elevations – Zones A1–A30, AE Complete Items C2.a–h below a Benchmark Utilized: private Indicate elevation datum used for X NGVD 1929   NAVI	be required when construction of the , AH, A (with BFE), VE, V1–V30, V (v ccording to the building diagram spec Vertical D r the elevations in items a) through h	building is complete. with BFE), AR, AR/A, AR cified in Item A7. In Puer atum: <u>NGVD29</u> ) below.		
<ul> <li>a) Top of bottom floor (including</li> <li>b) Top of the next higher floor</li> <li>c) Bottom of the lowest horizonta</li> <li>d) Attached garage (top of slab)</li> <li>e) Lowest elevation of machinen (Describe type of equipment a</li> <li>f) Lowest adjacent (finished) grag</li> <li>g) Highest adjacent (finished) grag</li> </ul>	basement, crawlspace, or enclosure al structural member (V Zones only) y or equipment servicing the building and location in Comments) ade next to building (LAG)	floor) <u>8 5</u> <u>12 3</u> <u>N/A</u> <u>N/A</u> <u>10 4</u> <u>8 2</u> <u>8 8</u>	Check the measurement used.	
SECTION	D – SURVEYOR, ENGINEER, OR	ARCHITECT CERTIFI	CATION	
This certification is to be signed and se I certify that the information on this Ce statement may be punishable by fine of Were latitude and longitude in Section Certifier's Name Paul M. Koelling, PLS, CFM	ealed by a land surveyor, engineer, o rtificate represents my best efforts to or imprisonment under 18 U.S. Code,	or architect authorized by interpret the data availa Section 1001. yor? ⊠Yes □No		
Title Licensed Land Surveyor Company Name Paul Koelling & Associates, LLC NJ ( Address 2161 Shore Road City	C.O.A. No. 24GA28256300 State	ZIP Code	Place Seal Here	
Linwood Signature	New Jersey Date	08221 Telephone		
Convollace and the File	10/13/2016	(609) 927-0279		
Copy all pages of this Elevation Certificat Comments (including type of equipment *A8b.) USA Flood Vents Model #FOAL **B8 & B9.) FEMA Pre-FIRM Zone "AE' ***C2a.) crawlspace enclosure (elev 8.5 vented through to crawlspace ****C2e.) Ductwork elev. 10.4, electrical	t and location, per C2(e), if applicable engineered for 252 square inches of 'Base Flood Elevation 9 ft. (NAVD j)Foyer (elev. 9.5) vented on one e	e) net area each	(NO)(520)	

ELEVATION CERT	TIFICATE			OMB No. 166 Expiration Da	60-0008 ate: November 30, 2018
PORTANT: In these s	paces, copy the corresp	onding information	from Section A.	FOR INSUR	ANCE COMPANY USE
Building Street Address 18 N. Osborne Ave.	(including Apt., Unit, Suite	, and/or Bldg. No.) or	P.O. Route and Box No.	Policy Numb	er:
City CITY OF MARGATE		State New Jersey	ZIP Code 08402	Company NA	AIC Number
	SECTION E BUILDING FOR 2		ORMATION (SURVEY N IE A (WITHOUT BFE)	OT REQUIRED)	
For Zones AO and A (wi complete Sections A, B, enter meters.	thout BFE), complete Item and C. For Items E1–E4, ι	is E1–E5. If the Certif use natural grade, if a	ficate is intended to suppo vailable. Check the meas	ort a LOMA or LOI urement used. In	MR-F request, Puerto Rico only,
the highest adjacen	formation for the following t grade (HAG) and the low por (including basement,			ther the elevation	is above or below
	oor (including basement,	······································		_	or below the HAG.
crawlspace, or e E2. For Building Diagrai	nclosure) is ns 6–9 with permanent flo	od openings provide	feet mo	_	or below the LAG.
the next higher floor the diagrams) of the	(elevation C2.b in				or below the HAG.
E3. Attached garage (to			feet 🗌 m	eters 🗌 above	or below the HAG.
E4. Top of platform of m servicing the buildin	nachinery and/or equipmen g is	nt	feet 🗌 me	eters 🗌 above	or below the HAG.
E5. Zone AO only: If no floodplain managen	flood depth number is avainent ordinance?		ne bottom floor elevated in own. The local official mu		
S	ECTION F - PROPERTY	OWNER (OR OWNE	R'S REPRESENTATIVE	CERTIFICATIO	N
The property owner or or community-issued BFE)	wner's authorized represe or Zone AO must sign her	ntative who complete re. The statements in	s Sections A, B, and E for Sections A, B, and E are	Zone A (without correct to the best	a FEMA-issued or st of my knowledge.
Property Owner or Owner	er's Authorized Representa	ative's Name			
Address	17 1		City	State	ZIP Code
Signature	· · · · · ·		Date	Telephone	
Comments	· • •	-	1		
				Chec	k here if attachments.

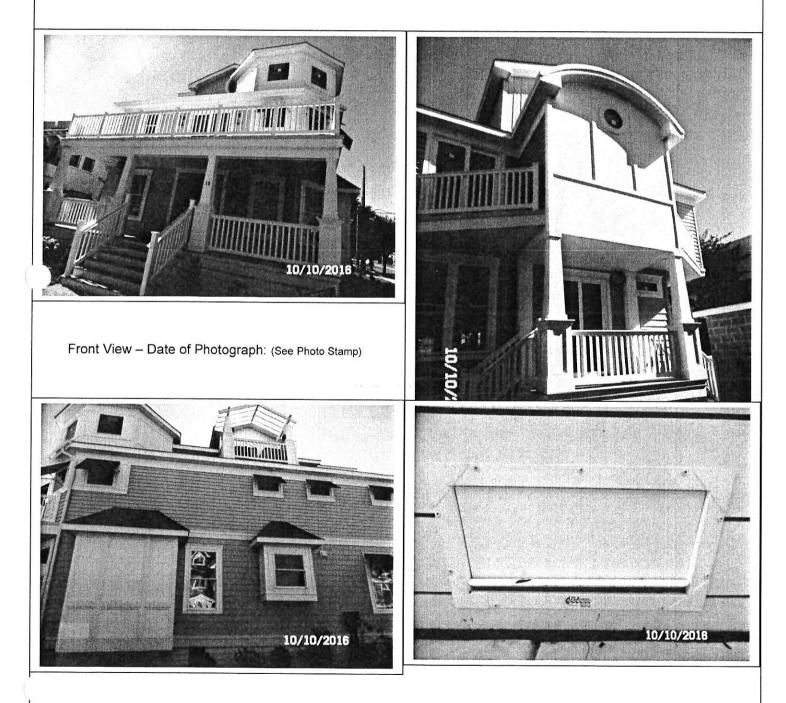
L

ELEVATION CERTIFICATE			OMB No. 1660-0008 Expiration Date: November 30, 2018
IMPORTANT: In these spaces, copy the corr	esponding information	n from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, S 18 N OSBORNE AVENUE	uite, and/or Bldg. No.) o	r P.O. Route and Box	No. Policy Number:
City MARGATE	State New Jersey	ZIP Code 08402	Company NAIC Number
SECTIO	ON G - COMMUNITY IN	FORMATION (OPTIC	NAL)
The local official who is authorized by law or or Sections A, B, C (or E), and G of this Elevatior used in Items G8–G10. In Puerto Rico only, er	n Certificate. Complete tl	ne community's floodpl he applicable item(s) a	ain management ordinance can complete nd sign below. Check the measurement
			gned and sealed by a licensed surveyor, cate the source and date of the elevation
G2. A community official completed Sect or Zone AO.	ion E for a building locat	ted in Zone A (without	a FEMA-issued or community-issued BFE)
G3. The following information (Items G4-	-G10) is provided for co	mmunity floodplain ma	nagement purposes.
G4. Permit Number	G5. Date Permit Issue	ed	G6. Date Certificate of Compliance/Occupancy Issued
G7. This permit has been issued for:	New Construction	Substantial Improvem	ent
G8. Elevation of as-built lowest floor (including 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 CFM	
JIM GALANTINO			
Community Name CITY OF MARGATE		Telephone 609-822-197	7A
Signature		Date 10/16/16	4
Comments (including/type of equipment and lo			
Comments (including/type of equipment and lo	cation, per C2(e), if appl	icable)	
· · · · · · · · · · · · · · · · · · ·			
			Check here if attachments.

# Building Photographs See Instructions for Item A6.

See Instructions for Item A6.		For Insurance Company Use: Policy Number	
Building Street Address (including Apt., Unit, Suite, and/or Bldg.) No. or P.O. Route and Box No. <b>A N. Osborne Ave.</b>			
City Margate	State NJ	ZIP Code <b>08402</b>	Company NAIC Number

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.



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

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

PAGE 03/06



# **ICC-ES Evaluation Report**

Most Widely Accepted and Trusted

# ESR-3907

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

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 <u>www.usafloodairvents.com</u> info@usafloodairvents.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<sup>®</sup> (IBC)
- 2015 and 2012 International Residential Code<sup>®</sup> (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. Issued October 2016 This report is subject to renewal October 2017.

A Subsidiary of the International Code Council®

**3.1.2 FASS:** The FASS is constructed of stainless steel and has a flap with 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  $\frac{1}{4}$  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 2.6.2.2 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 <sup>1</sup>/<sub>4</sub> 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.

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



Page 1 of 2

Page 2 of 2

## ESR-3907 | Most Widely Accepted and Trusted

# 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

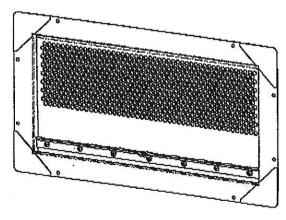
The USA Flood Air Vents models recognized in this report are identified by a label bearing the manufacturer's name, the model designation, and the evaluation report number (E\$R-3907).

MODEL DESIGNATION	VENT SIZE (Width x Height) (in)	ROUGH OPENING SIZE (Width x Height) (in)	ENCLOSED AREA COVERAGE (ft <sup>2</sup> )	FLAP NET FREE AREA <sup>1</sup> (in <sup>2</sup> )
FO\$\$	18 x 10	15 <sup>1</sup> / <sub>2</sub> x 7 <sup>1</sup> / <sub>2</sub>	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 <sup>1</sup> / <sub>2</sub> x 7 <sup>1</sup> / <sub>2</sub>	252	37
ROAL	16 <sup>3</sup> / <sub>8</sub> x 10	131/8 x 71/2	224	None

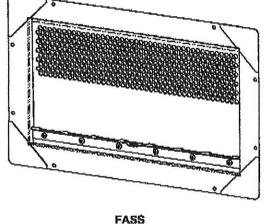
#### TABLE 1-USA FLOOD AIR VENTS

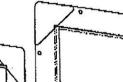
For SI: 1 inch = 25.4 mm

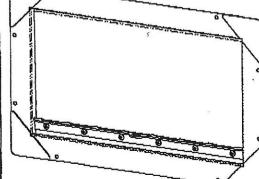
<sup>1</sup>Net free area in the vent flap for under-floor space ventilation.











FOSS & FOAL

ROAL