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 INSUI	RANCE COMPANY USE
A1. Building Owner's Name Michael and Candace Valdes Policy Number:						ber:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 15652 Gulf Blvd. Company NAIC Number:						IAIC Number:	
City Redington Bea	City State Redington Beach Florida						
	• •	nd Block Numbers, Ta Lone Palm Beach Pi				•	
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential							
A5. Latitude/Longi	tude: Lat. 2	7°48'23.5" N	Long. 82	2°48'32.8" W	Horizonta	l Datum: NAD	1927 × NAD 1983
A6. Attach at least	2 photograp	hs of the building if the	e Certific	ate is being u	sed to obtain floo	d insurance.	
A7. Building Diagra	am Number	6					
A8. For a building	with a crawls	pace or enclosure(s):					
a) Square foo	tage of crawl	space or enclosure(s)		2	2541.00 sq ft		
b) Number of	permanent flo	ood openings in the cr	awlspace	e or enclosure	e(s) within 1.0 foo	t above adjacent gr	ade 25
c) Total net ar	ea of flood o	penings in A8.b	2	750.00 sq in	l		
d) Engineered	I flood openir	ngs? 🗵 Yes 🗌 N	No				
A9. For a building \	vith an attach	ned garage:					
a) Square foot	a) Square footage of attached garageN/A sq ft						
b) Number of	permanent flo	ood openings in the at	tached g	arage within	1.0 foot above adj	acent grade 0	
c) Total net ar	ea of flood op	penings in A9.b		0.00 sq	in		
d) Engineered	d) Engineered flood openings?						
DA NEID O		ECTION B – FLOOD	INSURA		· ,	ORMATION	Tpo 0//
Town Of Redingtor	•	Community Number 140		,		B3. State Florida	
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Effe	RM Panel ective/ vised Date	B8. Flood Zone(s)	B9. Base Flood E (Zone AO, us	Elevation(s) e Base Flood Depth)
12103C0191	G	08-18-2009	09-03-2		VE	13.0	
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							
Designation	Date:		CBRS	☐ OPA			_

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 15652 Gulf Blvd.	Policy Number:				
City State Redington Beach Flori		Code 08	Company NAIC Number		
SECTION C – BUILDING ELE	VATION INFORMAT	TION (SURVEY RE	:QUIRED)		
C1. Building elevations are based on: Construction *A new Elevation Certificate will be required when co C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), Complete Items C2.a–h below according to the build Benchmark Utilized: "REDINGTON RM" 2 PID AGO Indicate elevation datum used for the elevations in item NGVD 1929 NAVD 1988 Other/S Datum used for building elevations must be the same a) Top of bottom floor (including basement, crawlspath) Top of the next higher floor c) Bottom of the lowest horizontal structural member d) Attached garage (top of slab) e) Lowest elevation of machinery or equipment serv (Describe type of equipment and location in Common Incompany Company (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment and location in Common Incompany (Describe type of equipment Incompany (Describe type of e	n Drawings*	ding Under Construng is complete. FE), AR, AR/A, AR/A in Item A7. In Puerto NAVD 1988 w.	ction* \boxtimes Finished Construction AE, AR/A1–A30, AR/AH, AR/AO.		
 h) Lowest adjacent grade at lowest elevation of deck structural support 	c or stairs, including		5.8 × feet meters		
SECTION D – SURVEYOR,	ENGINEER, OR AR	CHITECT CERTIFI	CATION		
This certification is to be signed and sealed by a land surv I certify that the information on this Certificate represents statement may be punishable by fine or imprisonment und Were latitude and longitude in Section A provided by a lice	my best efforts to inter der 18 U.S. Code, Sed	rpret the data availa tion 1001.	law to certify elevation information. ble. I understand that any false Check here if attachments.		
Certifier's Name Dennis J. Eyre Title	License Number 2865				
Professional Surveyor and Mapper Company Name Geodata Services, Inc. Address 1166 Kapp Drive			Place Seal Here		
City Clearwater	State Florida	ZIP Code 33765			
Signature	Date 06-27-2019	Telephone (727) 447-1763	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) This elevation certificate includes a 2 page attachment with surveyor's comments and sketch, and an attachment of the ICC-ES Evaluation Report for the flood vent model noted. It is not complete without the attachments.					

ELEVATION CERTIFICATE

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

	ORTANT: In these spaces, copy the corre	FOR INSURANCE COMPANY USE				
	lding Street Address (including Apt., Unit, Sui 852 Gulf Blvd.	ite, and/or Bldg. No.) or	P.O. Route and Box No.	Policy Number:		
City Rec	/ dington Beach	State Florida	ZIP Code 33708	Company NAIC Number		
		NG ELEVATION INFO R ZONE AO AND ZON	ORMATION (SURVEY NO IE A (WITHOUT BFE)	OT REQUIRED)		
con	for Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, omplete 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 the highest adjacent grade (HAG) and the load. Top of bottom floor (including becomen	owest adjacent grade (L		her the elevation is above or below		
	a) Top of bottom floor (including basement, crawlspace, or enclosure) isb) Top of bottom floor (including basement,	<u> </u>	feet me	eters above or below the HAG.		
	crawlspace, or enclosure) is		feet me	eters above or below the LAG.		
E2.	For Building Diagrams 6–9 with permanent the next higher floor (elevation C2.b in the diagrams) of the building is	flood openings provided		/or 9 (see pages 1–2 of Instructions), eters ☐ above or ☐ below the HAG.		
E3.	Attached garage (top of slab) is		feet _ me	eters above or below the HAG.		
E4.	Top of platform of machinery and/or equipm servicing the building is	nent	feet me	eters above or below the HAG.		
E5.	Zone AO only: If no flood depth number is a floodplain management ordinance? Ye			accordance with the community's st certify this information in Section G.		
	SECTION F - PROPERT	Y OWNER (OR OWNE	R'S REPRESENTATIVE)	CERTIFICATION		
The	e property owner or owner's authorized repres nmunity-issued BFE) or Zone AO must sign h	sentative who complete nere. The statements in	s Sections A, B, and E for Sections A, B, and E are	Zone A (without a FEMA-issued or correct to the best of my knowledge.		
Pro	perty Owner or Owner's Authorized Represe	ntative's Name				
Adc	dress		City	State ZIP Code		
Sig	nature		Date	Telephone		
Cor	mments					
				Check here if attachments.		

ELEVATION CERTIFICATE

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

MPORTANT: In these spaces, copy the corre	FOR INSURANCE COMPANY USE						
Building Street Address (including Apt., Unit, St 15652 Gulf Blvd.	uite, and/or Bldg. N	lo.) or P.O. Route and Bo	x No.	Policy Number:			
City Redington Beach	State Florida	ZIP Code 33708		Company NAIC Number			
SECTION G – COMMUNITY INFORMATION (OPTIONAL)							
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, en	Certificate. Compl						
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 Section or Zone AO.	A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.						
G3. The following information (Items G4–	-G10) is provided for	or community floodplain n	nanageme	ent purposes.			
G4. Permit Number	G5. Date Permit	Issued		Date Certificate of Compliance/Occupancy Issued			
G7. This permit has been issued for:	New Constructio	n Substantial Improve	ement				
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		Title					
Community Name		Telephone					
Signature		Date					
Comments (including type of equipment and loc	cation, per C2(e), it	f 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 15652 Gulf Blvd.	Policy Number:		
City	State	ZIP Code	Company NAIC Number
Redington Beach	Florida	33708	

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 06-20-2019

Clear Photo One



Photo Two

Photo Two Caption Rear View 06-20-2019

Clear Photo Two

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

Continuation Page

OMB No. 1660-0008

Expiration Date: November 30, 2018

		<u> </u>	•
IMPORTANT: In these spaces, copy	FOR INSURANCE COMPANY USE		
Building Street Address (including Apt 15652 Gulf Blvd.	o. Policy Number:		
City	State	ZIP Code	Company NAIC Number
Redington Beach	Florida	33708	

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 Left Side View 06-20-2019

Clear Photo Three



Photo Four

Photo Four Caption Right Side View 06-20-2019

Clear Photo Four
Form Page 6 of 6

Elevation Certificate Attachment

Surveyor's Comments and Sketch 15652 Gulf Blvd., Redington Beach FL 33708 Date: 06-27-2019

Comments:

- A4. 3 story residence.
- A5. Determined with GIS program "Google Earth".
- A7. Residence constructed on columns with break away walls.
- A8.a) Total of (3) ground floor enclosures.

1 enclosure with full story foundation walls. Area = 255 square feet,

(Entryway and elevator only, no living area.)

1 Garage (front) enclosure with break away walls. Area = 1194 square feet.

(No living area.)

1 Storage (rear) enclosure with break away walls. Area = 1092 square feet.

(No living area.)

A8.b) 21 flood openings within 1.0 foot of exterior grade. 4 flood openings within 1.0 feet of interior grade.

Entryway enclosure: 4 flood openings, exterior venting to break away wall enclosures.

Garage (front) enclosure: 11 flood openings, exterior venting to outside of building.

Storage (rear) enclosure: 10 flood openings, exterior venting to outside of building.

- A8.c) Total net area, without regard to vents or covers.
- A8.d) "Flood Solutions", model FS-1608-HEX, each providing 110 square feet of flood coverage,

Entryway enclosure 440 square feet of flood coverage.

Garage enclosure 1210 square feet of flood coverage.

Storage enclosure 1100 square feet of flood coverage.

Note: See page 2 attachment for all flood vent installation locations. All vents being the noted model.

- B7. Panel Effective date.
- C2.a) Ground floor enclosures elevation.
- C2.b) 2nd floor elevation. (1st living floor).
- C2.e) Air conditioner at left side of building.

Additional elevations:

Electric service panel at left side of building elevation = 18.3 feet.

Tankless water heaters at left side of building elevation = 20.5 feet.

Elevator equipment inside of building elevation = 24.25 feet.

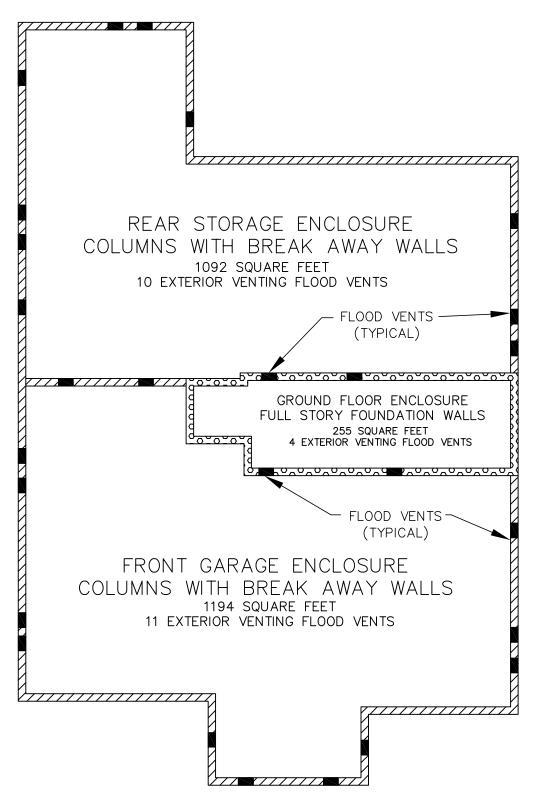
SURVEYOR CERTIFICATION

This attachment was prepared under my direction and supervision.

Licensed by the State of Florida to practice surveying and mapping.

Dennis J. Eyre PSM 2865 Geodata Services, Inc. 1166 Kapp Dr. Clearwater, FL 33765

GROUND FLOOR FLOOD VENT SKETCH



SQUARE FOOTAGES BASED ON OUTSIDE MEASUREMENTS WHICH INCLUDES WALL WIDTHS





ICC-ES Evaluation Report

ESR-3760

Reissued 03/2018

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

Reissued 03/2018 This report is subject to renewal 03/2020.

DIVISION: 08 00 00—OPENINGS

SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

REPORT HOLDER:

FLOOD SOLUTIONS, LLC

ONE INDUSTRIAL PARK DRIVE, BUILDING 27 PELHAM, NEW HAMPSHIRE 03076

EVALUATION SUBJECT:

STATIC FLOOD VENTS



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AGGREDITED
ISO/IEC 17065
Product Certification Body
#1000



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ICC-ES Evaluation Report

ESR-3760

Reissued March 2018

This report is subject to renewal March 2020.

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DIVISION: 08 00 00—OPENINGS

Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

FLOOD SOLUTIONS, LLC
ONE INDUSTRIAL PARK DRIVE
BUILDING 27
PELHAM, NEW HAMPSHIRE 03076
(800) 325-9775
www.floodsolutions.com
info@floodsolutions.com

EVALUATION SUBJECT:

STATIC FLOOD VENTS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018, 2015, 2012 and 2009 International Building Code®
- 2018, 2015, 2012 and 2009 International Residential Code®

Property evaluated:

Water flow

2.0 USES

Flood Solutions' static flood vents are used to provide for the equalization of hydrostatic flood forces on exterior walls.

3.0 DESCRIPTION

3.1 General:

Flood Solutions' static flood vents are engineered, permanently open flood vents with no moving parts that automatically allow flood waters to enter and exit enclosed areas. The vents are constructed of aluminum and available in four models. See Table 1 for model designations and sizes. See Figure 1 for illustrations of the flood vents.

3.2 Engineered Opening:

The Flood Solutions static flood vents comply with the design principle noted in Section 2.6.2.2 of ASCE/SEI 24 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, the static flood vents must be installed in accordance with Section 4.0 of this report.

3.3 Ventilation:

Flood Solutions' static flood vents may be used to supply natural ventilation for under-floor ventilation. See Table 1 for net free area for under-floor ventilation provided by each of Flood Solutions' static flood vents.

4.0 DESIGN AND INSTALLATION

The Flood Solutions static flood vents are designed to be installed into walls or doors of existing or new construction from the exterior side. Installation of the vents must be in accordance with the manufacturer's instructions, the applicable code and this report. In order to comply with the engineered opening design principle noted in Section 2.6.2.2 of ASCE/SEI 24, the vents must be installed as follows:

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

5.0 CONDITIONS OF USE

The static flood vents described in this report comply with, or are 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 static 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 static flood vents must not be used in the 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

- 6.1 Manufacturer's descriptive literature and installation instructions.
- **6.2** Detail drawings.
- **6.3** Engineering calculations in accordance with ASCE/SEI 24.
- 6.4 Quality documentation in accordance with the ICC-ES Acceptance Criteria for Quality Documentation (AC10), dated June 2014.



7.0 IDENTIFICATION

The Flood Solutions static flood vents recognized in this report must be identified by a label bearing the

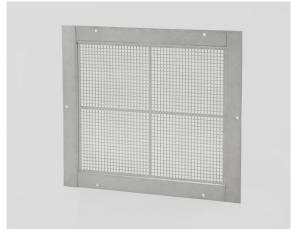
manufacturer's name (Flood Solutions), the model number, and the evaluation report number (ESR-3760).

TABLE 1—FLOOD SOLUTIONS STATIC FLOOD VENTS

MODEL	VENT SIZE (Width x Height) (in)	ROUGH OPENING SIZE (Width x Height) (in)	ENCLOSED AREA COVERAGE (ft²)	NET FREE AREA ¹ (in ²)
FS-1608	$18^{1}/_{2} \times 10^{1}/_{2}$	16 x 8	97	80.7
FS-1616	$18^{1}/_{2} \times 18^{1}/_{2}$	16 x 16	191	158.2
FS-1412	17 x 14 ¹ / ₂	14 ¹ / ₂ x 12	129	106.7
FS-1608-Hex	$18^{1}/_{2} \times 10^{1}/_{2}$	16 x 8	110	91.4

For **SI**: 1 inch = 25.4 mm; 1 ft = 304.8 mm

¹Available for use as under-floor ventilation.







FS-1608



FS-1616



FS-1608-HEX

FIGURE 1—FLOOD SOLUTIONS STATIC FLOOD VENTS



ICC-ES Evaluation Report

ESR-3760 FBC Supplement

Reissued March 2018

This report is subject to renewal March 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 SOLUTIONS, LLC
ONE INDUSTRIAL PARK DRIVE
BUILDING 27
PELHAM, NEW HAMPSHIRE 03076
(800) 325-9775
www.floodsolutions.com
info@floodsolutions.com

EVALUATION SUBJECT:

STATIC FLOOD VENTS

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Flood Solutions' flood vents, recognized in ICC-ES master evaluation report ESR-3760, 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 Solutions flood vents, described in Sections 2.0 through 7.0 of the master evaluation report <u>ESR-3760</u>, 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 Solutions' 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 March 2018.

