## **ELEVATION CERTIFICATE**

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

☐ Check here if attachments.		
	Comments (including type of equipment and location, per C2(e), if applicable)	Comm
	re Date	Signature
	Community Name Telephone	Comn
	Local Official's Name Title	Local
et 🗌 meters Datum	Community's design flood elevation:	G10.
et 🗌 meters Datum	BFE or (in Zone AO) depth of flooding at the building site:	G9.
et 🗌 meters Datum	Elevation of as-built lowest floor (including basement) [ feet	G8.
	This permit has been issued for: ☐ New Construction ☐ Substantial Improvement	<b>G</b> 7.
Date Certificate of Compliance/Occupancy Issued	Permit Number   G5. Date Permit Issued   G6.	Q4. F
ment purposes.	☐ The following information (Items G4—G10) is provided for community floodplain management purposes.	<b>G</b> 3.
MA-issued or community-issued BFE)	A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.	G2.
and sealed by a licensed surveyor, the source and date of the elevation	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.)	G1.
nanagement ordinance can complete gn below. Check the measurement	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.	The I
)	SECTION G - COMMUNITY INFORMATION (OPTIONAL)	
Company NAIC Number	State ZIP Code Florida 34223	City Englewood
FOR INSURANCE COMPANY USE Policy Number:	IMPORTANT: In these spaces, copy the corresponding information from Section A.  Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 7960 Manasota Key Road	Buildi 7960

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

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

# 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.

	3			
		CBRS   OPA		Designation Date:
∞d Area (OPA)? ☐ Yes 🕱 No	a or Otherwise Protecto	urces System (CBRS) are	Coastal Barrier Reso	B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?
Other/Source:	X NAVD 1988  Other	☐ NGVD 1929	sed for BFE in Item B	B11. Indicate elevation datum used for BFE in Item B9:
9:	depth entered in Item B	(BFE) data or base flood on the contraction (BFE) data or base flood of the contraction (BFE) data or base flood or base floo	Base Flood Elevation (BFE)	B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:
	10.0"	11-04-2016 AE	11-04-2016	12115C0432 F
B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)	B8. Flood B9. Bas Zone(s) (Zor	B7. FIRM Panel B8 Effective/ Zo	B6. FIRM Index Date	B4. Map/Panel B5. Suffix Number
B3. State Florida	ō	B2. County Name Sarasota	& Community Number	B1. NFIP Community Name & C Sarasota County 125144
NO	(FIRM) INFORMATI	- FLOOD INSURANCE RATE MAP (FIRM) INFORMATION	SECTION B - FLOOD I	l .
	10	ā	gs? 🕱 Yes 🗌 No	d) Engineered flood openings?
		730.00 sq in	penings in A9.b	c) Total net area of flood openings in A9.b
de 6	garage within 1.0 foot above adjacent grade	tached garage within 1.0 f	ood openings in the at	b) Number of permanent flood openings in the attached
		1012.00 sq ft	ned garage	<ul> <li>a) Square footage of attached garage</li> </ul>
			າed garage:	A9. For a building with an attached garage:
		No	X Yes	d) Engineered flood openings?
		3164.00 sq in	penings in A8.b	c) Total net area of flood openings in A8.b
ljacent grade 26	within 1.0 foot above ac	awispace or enclosure(s)	ood openings in the cr	b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade
	4899.00 sq ft	57	space or enclosure(s)	a) Square footage of crawlspace or enclosure(s)
			pace or enclosure(s):	A8. For a building with a crawlspace or enclosure(s):
			6	A7. Building Diagram Number
Ce.	to obtain flood insuran	e Certificate is being used	hs of the building if the	A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance
☐ NAD 1927 🕱 NAD 1983	Horizontal Datum:	Long. W82° 24' 15.7"	Lat. N26° 59' 45.4"	A5. Latitude/Longitude: Lat. N
	Residential	Addition, Accessory, etc.)	ntial, Non-Residential,	A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)
	Description, etc.)	ax Parcel Number, Legal I in Section 16-40-19	nd Block Numbers, Tad Bounds Description	A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Parcel #0489240006, Metes and Bounds Description in Section 16-40-19
34223	ယ္	Florida		Englewood
ZIP Code	Z	State		City
				7960 Manasota Key Road
Company NAIC Number:		te, and/or Bldg. No.) or P.	cluding Apt., Unit, Suit	A2. Building Street Address (including Apt., Unit, Suite, and/or Bidg. No.) or P.O. Route and Box No.
Policy Number:	7			Robert C. Krause
FOR INSURANCE COMPANY USE		/ INFORMATION	SECTION A - PROPERTY INFORMATION	NA Brillding Dumor's Nama
				111

OMB No. 1660-0008

			File #:17-0042 F.B.19-05 Pg. 37
20 square inches each. or a total 1320.0 square	ed at 22 vents fo	engineered Flood Flaps model No. FFWF08, Rate 20.0 square inches. The Garage area contains 6	C2-A, Elevations is unfinished crawl space area. C2-E, represents the outside A/C unit. The Vents are engineered Flood Flaps model No. FFWF08, Rated at 220 squ The Crawl space area contains 26 vents for a total 5720.0 square inches. The Garage area contains 6 vents for a tot inches.
			Comments (including type of equipment and location, per C2(e), if applicable)
agent/company, and (3) building owner.	nt/comp		Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance
	Ext.	Date Telephone E 05-24-2019 (941) 475-6596	Signature R. M. M.
	, Line	State ZIP Code Florida 34224	City Englewood
Here			Address 4315 S. Access Road
Seal			Company Name DMK Associates, Inc.
			Title Professional Surveyor and Mapper
		License Number 4855	Certifier's Name Warren A. McLeod
Check here if attachments.		a licensed land surveyor? XYes No	Were latitude and longitude in Section A provided by a licensed land surveyor?
tify elevation information. rstand that any false	w to cert	surveyor, engineer, or architect authorized by law sints my best efforts to interpret the data available tunder 18 U.S. Code, Section 1001.	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.
	MOIT	SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION	SECTION D - SURVEYO
{ feet ☐ meters	  X	deck or stairs, including	<ul> <li>h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support</li> </ul>
feet	50 X	ding (HAG) 11.50	g) Highest adjacent (finished) grade next to building (HAG)
∫ feet	30 X	ling (LAG) 11.30	f) Lowest adjacent (finished) grade next to building (LAG)
X feet  meters		servicing the building 17.00	<ul> <li>e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)</li> </ul>
X feet  meters			
		mber (V Zones only) 17.10	
O X feet  meters	12.30 X		a) Top of bottom floor (including basement, crawlspace, or enclosure floor)
		Other/Source:  be the same as that used for the BFE.	☐ NGVD 1929 区 NAVD 1988 ☐ Other/Source:  Datum used for building elevations must be the same as that used for the BFE
	i	in items a) through h) below.	2
I-A30, AR/AH, AR/AO. y, enter meters.	uerto Rico only, ente		
			*A new Elevation Certificate will be required when construction of the building is complete.
X Finished Construction		☐ Construction Drawings* ☐ Building Under Construction*	C1. Building elevations are based on: Constru
)	UIRED)	BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)	SECTION C - BUILDING
y NAIC Number	Company NAIC	State ZIP Code C Florida 34223	City S Englewood
ımber:	Policy Number:	Box No.	Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 7960 Manasota Key Road
URANCE COMPANY USE	FOR INSURAN		IMPORTANT: In these spaces, copy the corresponding information from Section A.
Expiration Date: November 30, 2018	piration	C	ELEVATION CEXTIFICATE

## **ELEVATION CERTIFICATE**

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

Total Manesoria Key Road  SECTION E - BUILDING ELEVATION INFORMATION (SIRREY NOT REQUIRED)  For Zones AO and A (without BFE) complete Issues E.F.E. If the Cartillate is intended to support a LOMA or LOMA-F request, complete Sections A. Band C. For Items E.F.E. use natural grade, if a validable. Check the measurement seed. In Pacific Boomer, replaced (Housing and check the appropriate boxes to show whether the elevation is above or below the highest disjoint grade (HAC) and the boxest edipicent grade (LAG).  If the project disjoint grade (HAC) and the fixeding and check the appropriate boxes to show whether the elevation is above or below the high port of workpace, or enclosure) is  In order pace in the building is  In orde	IMPORTANT: In these spaces, copy the corresponding information from Section A.
Sota Key Road  Si elevation info nest adjacent (of bottom floo vispace, or en of bottom floo vispace, or en lding Diagram t higher floor ( grams) of the t grams) of the t grams) of the t sued garage (top platform of ma in manageme  SE(  owner or own ssued BFE) or mer or Owner	T: In these
Road  A (with A (with m floor on info accent; or en floor of the transfer of the transfer or own series) or owner.	986
	i pa
section E  Section E  Section E  When the grade (HAG oor (including enclosure) is oor (including enclosure) is portion or slab) is portion or slab) is profession or slab) is performent ordinance or Zone AO refers Authorize	ces, co
State    State   ZIP Code   Company NA	py the
ilLDING FOR Z FOR Z  which item ment, ment flo nent flo nent flo nent flo nesser is ava  very very ment, ment flo nent	corresp
State Florida	onding
	inform
INFORM ZONE A ZONE A Certificate a, if availa appropriate (LAG) of the bo Inknown.  City  City  Date	ation fro
ZIP Code 34223  MATION (SI A (WITHOU  ate boxes to 3).  Section A It  Section A It  The local  The local  REPRESE  SREPRESE	om Sec
Code  Code  N (SURN N (SURN HOUT B  I feet  I feet  Oor elev local offi A, B, and  A, B, and	tion A.
State Florida State Florida SUILDING ELEVATION INFORMATION (SUPVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)  The following and check the appropriate boxes to show whether the elevation sharment, basement, basement,	
Comport a LOMA urement us sters	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Company NAIC  REQUIRED)  OMA or LOMR the elevation is the elevation is a bove or above or phone  CTIFICATION  To Check he	FOR INSURAN
ALIC Nu por	RANCE
ZIP Code  34223  NINFORMATION (SURVEY NOT REQUIRED)  ND ZONE A (WITHOUT BFE)  The Certificate is intended to support a LOMA or LOMR-F request, rade, if available. Check the measurement used. In Puerto Rico only, readle (LAG).    feet	COMP/
request, to Rico only, below the HAG. ommunity's on in Section G.  ZIP Code  ZIP Code	FOR INSURANCE COMPANY USE

## **BUILDING PHOTOGRAPHS**

## **ELEVATION CERTIFICATE**

See Instructions for Item A6.

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

IMPORTANT: In these spaces, copy the corresponding information from Section A.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. \$ Englewood 7960 Manasota Key Road Florida State 34223 ZIP Code Company NAIC Number Policy Number: FOR INSURANCE COMPANY USE

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.

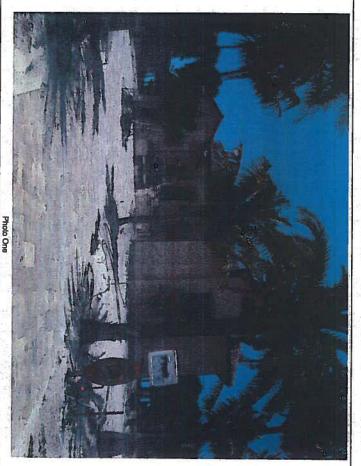
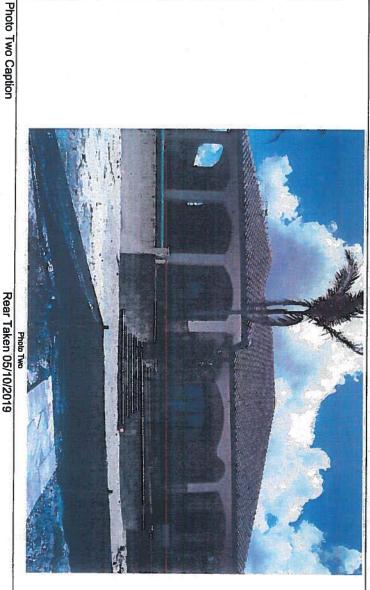


Photo One Caption

Front Taken 05/10/2019

Clear Photo One



Clear Photo Two

## **ELEVATION CERTIFICATE BUILDING PHOTOGRAPHS**

Continuation Page

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

IMPORTANT: In these spaces, copy the corresponding information from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bidg. No.) or P.O. Route and Box No. 7960 Manasota Key Road	$\overline{}$
City State ZIP Code Englewood Florida 34223	Company NAIC Number

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.

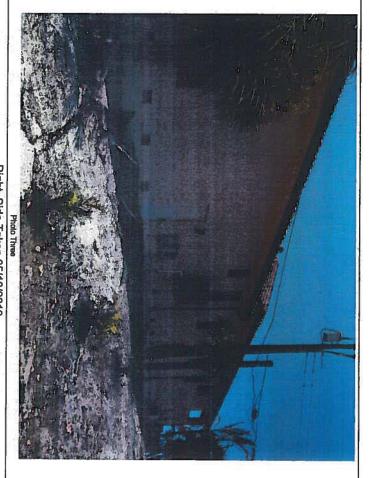


Photo Three Caption

Right Side Taken 05/10/2019

Clear Photo Three

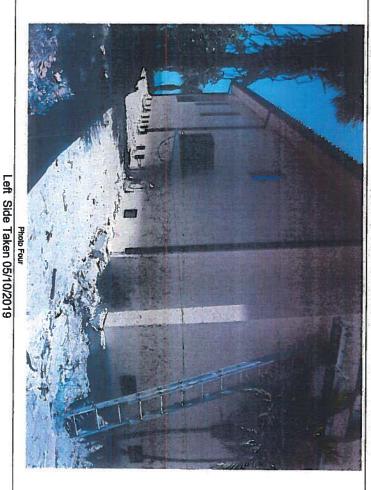


Photo Four Caption

FEMA Form 086-0-33 (7/15)

Form Page 6 of 6

Clear Photo Four



## ICC-ES Evaluation Report

ESR-3560

This report is subject to renewal September 2017.

Reissued September 2015

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:

FLOOD FLAPS<sup>®</sup>, LLC 2707 WATERPOINTE CIRCLE MT. PLEASANT, SOUTH CAROLINA 29466 (843) 849-8031 www.floodflaps.com info@floodflaps.com

### **EVALUATION SUBJECT:**

FLOOD FLAPS® FLOOD VENTS: MODELS FFWF12; FFNF12; FFNF08; FFNF05; FFNF05

### 1.0 EVALUATION SCOPE

## Compliance with the following codes:

- 2012 and 2009 International Building Code® (IBC)
- 2012 and 2009 International Residential Code® (IRC)

### Properties evaluated:

- Physical operation
- Water flow
- Weathering

#### **2.0 USES**

Flood Flaps® are used to provide for the equalization of hydrostatic flood forces on exterior walls.

### 3.0 DESCRIPTION

#### 3.1 General:

Flood Flaps® 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 FVs 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 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®FV.

## 3.2 Engineered Opening:

The Flood Flaps® FVs 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, Flood Flaps® FVs must be installed in accordance with Section 4.0.

### 3.3 Model Sizes:

The Flood Flaps $^{\otimes}$  FV model designations and sizes are as follows:

MODEL	(in)	(in)	DEPTH (in)
FFWF12	4.55	73,	5
FFNF12	8/ C1	114	77
FFWF08	5,	-3,	
FFNF08	8/ CI	114	α
FFWF05	4.55	-3,	,
FFNF05	8/ C1	1 /4	Ů

For SI: 1 inch = 25.4 mm.

The FFWF series include two rubber flaps for the prevention of air flow. The FFNF series omit the rubber flaps.

### 3.4 Ventilation:

Flood Flaps® 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 of net free opening to supply natural ventilation for under-floor ventilation. Flood Flaps® 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® 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® 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 Section 2.6.2.2 of ASCE/SEI 24, 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<sup>®</sup> 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® 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® 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 October 2013.

### 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).

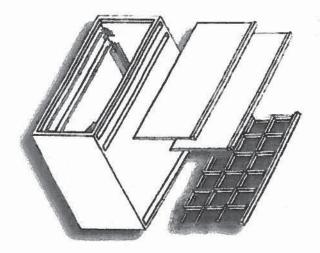


FIGURE 1—FLOOD FLAPS® FLOOD VENT



### Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400

> Rick Scott Governor

Carlos Lopez-Cantera Lt. Governor

Jonathan P. Steverson Secretary

February 25, 2016

Robert C. Krause, Trustee c/o Brett D. Moore, P.E., Humiston & Moore Engineers 5679 Strand Court Naples, Florida 34110

Dear Brett Moore:

# 100-Year Storm Elevation Site Specific Determination

File Number: S
Property Owner Name: R

Robert C. Krause, Trustee

Location of Subject Property: Environmental Protection's reference monument R-163, in Sarasota County. Between approximately 167 feet and 267 feet north of the Department of

Project address: 7960 Manasota Key Road, Sarasota.

of the 100-year storm elevation at the project address. This is in response to your letter received by the Department on February 23, 2016 requesting a site specific determination

structure as part of the environmental permit application process. Based on the survey and site plan submitted with your or higher. In addition the design grade (scour elevation) is +1.9 feet (NAVD), or lower. Department. The 100-year storm elevation (elevation of the lowest horizontal structural member) is + 16.2 feet (NAVD). request, a site specific 100-year storm elevation for the proposed habitable structure has been determined by the of Environmental Protection determine a site-specific 100-year storm elevation for the applicant's proposed habitable Located Seaward of a Coastal Construction Control Line." Alternatively, an applicant may request that the Department of Environmental Protection in the report titled "One-Hundred year storm Elevation requirements for Habitable Structures which places the lowest horizontal member above the 100-year storm elevation as determined by the Florida Department Pursuant to Subsection 3109, Florida Building Code, all habitable structures shall be elevated at or above an elevation

questions, concerns, or need additional information, please contact me at the letterhead address (add Mail Station 300), or by telephone at 850/245-7674, or by e-mail at Muthuswamy.subbuswamy@dep.state.fl.us. other local, state, or federal regulatory agency which has jurisdiction over the proposed activity. If you have any This determination does not relieve you from your responsibility to comply with the permitting requirements of any

Sincerely,

S. Muthuswamy, Ph,D., Permit Manager Coastal Construction Control Line Progr.

Coastal Construction Control Line Program
Division of Water Resource Management

cc: Kelly Cramer, Field Inspector

:: Kelly Cramer, Field Inspector Sarasota County, Building Official Robert C. Krause, Trustee, Property Owner