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

☐ Check here if attachments.		
	if applicable)	Comments (including type of equipment and location, per C2(e), if applicable)
	Date	Signature
	Telephone	Community Name
	Title	Local Official's Name
feet  meters Datum	feet	G10. Community's design flood elevation:
meters Datum	feet	G9. BFE or (in Zone AO) depth of flooding at the building site:
meters Datum	feet	G8. Elevation of as-built lowest floor (including basement) of the building:
	New Construction [] Substantial Improvement	G7. This permit has been issued for:
Date Certificate of Compliance/Occupancy Issued	G6.	G4. Permit Number 18-142319 BA G5. Date Permit Issued
ent purposes.	for community floodplain manageme	G3.  The following information (Items G4–G10) is provided for community floodplain management purposes
\-issued or community-issued BFE)	ig located in Zone A (without a FEMA	G2. A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
d sealed by a licensed surveyor, source and date of the elevation	cumentation that has been signed an ify elevation information. (Indicate the	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.)
nagement ordinance can complete below. Check the measurement	nister the community's floodplain man plete the applicable item(s) and sign	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.
	SECTION G - COMMUNITY INFORMATION (OPTIONAL)	SECTION G - COMMUN
Company NAIC Number	ZIP Code	City State
FOR INSURANCE COMPANY USE Policy Number:	No.) or P.O. Route and Box No.	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.

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.

	OFC	SECTION A - PROPERTY INFORMATION	INTORMA ION		TOK INCOM	FOR INSURANCE COMPANY USE
A1. Building Owner's Name GLEN & MELINDA HAGGETT	r's Name HAGGETT	3	36.		Policy Number	ber:
A2. Building Street Ac Box No. 1610 SATURN ROAD	Address (inc	cluding Apt., Unit, Suit	Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.  O SATURN ROAD	r P.O. Route and	Company N	Company NAIC Number:
City VENICE			State Florida		ZIP Code 34293	
A3. Property Desci LOTS 5062, 5063 &	iption (Lot and 5064, SOU	A3. Property Description (Lot and Block Numbers, Ta) LOTS 5062, 5063 & 5064, SOUTH VENICE UNIT #20	A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) LOTS 5062, 5063 & 5064, SOUTH VENICE UNIT #20	al Description, etc	۳	
A4. Building Use (e	g., Residen	tial, Non-Residential,	Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)	tc.) ACCESSORY		
A5. Latitude/Longitude: Lat. 27.04095N	ude: Lat. 2	7.04095N.	Long82.42523W.	Horizontal Datum:	Datum: NAD 1927	927 X NAD 1983
A6. Attach at least	2 photograp	hs of the building if the	Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance	sed to obtain flood	insurance.	
A7. Building Diagram Number		1A				
A8. For a building v	vith a crawls	For a building with a crawlspace or enclosure(s):				
a) Square foot	age of crawl	<ul> <li>a) Square footage of crawlspace or enclosure(s)</li> </ul>		840 sq ft		
b) Number of p	ermanent flo	od openings in the cr	b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade	(s) within 1.0 foot	above adjacent gra	ide 4
c) Total net area of flood openings in A8.b	a of flood op	enings in A8.b	<b>880</b> sq in			
d) Engineered flood openings?	flood openin	× Yes	No			
A9. For a building with an attached garage	ith an attach	ed garage:				
<ul> <li>a) Square footage of attached garage</li> </ul>	age of attach	ed garage	NA sq ft			2
b) Number of p	ermanent flo	od openings in the at	b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade NA	l.0 foot above adja	cent grade NA	
c) Total net are	a of flood op	Total net area of flood openings in A9.b	NA sq in	5		
d) Engineered flood openings?	flood openin	☐ Yes ※	No			
	SE	CTION B - FLOOD	SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION	MAP (FIRM) INFO	DRMATION	
B1. NFIP Community Name & Community Number	ty Name & C	ommunity Number	B2. County Name	Name		B3. State
SARASOTA COUNTY	NTY	125144	SARASOTA			Florida
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/ Revised Date	B8. Flood Zone(s)	89. Base Flood El (Zone AO, use	89. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)
12115C/0341F	П	11/04/2016	11/04/2016	AE	10.0	
B10. Indicate the so ☐ FIS Profile	ource of the	Base Flood Elevation (BFE)	Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9	od depth entered	in Item B9:	
B11. Indicate eleva	tion datum u	Indicate elevation datum used for BFE in Item B9: [] NGVD 1929		NAVD 1988 [	Other/Source:	
B12. Is the building	located in a	Coastal Barrier Reso	Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? 🔲 Yes	area or Otherwise	Protected Area (O	)PA)? ☐ Yes ☒ No
Designation Date	ate:		CBRS   OPA	DE:		

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

		EACH VENT IS RATED AT 220 SQ. INCHES TOTAL AREA OF VENTS (880 SQ. INCHES) IS GREATER THAN FLOOR AREA OF 840 SQ. FEET.	7 - 30 31
	DETACHED GAR	Comments (including type of equipment and location, per C2(e), if applicable)  LATITUDE AND LONGITUDE BY; LATLONG.NETTHIS STRUCTURE IS A DETACHED GARAGE	
ากปcompany, ลูกd (3) building owner.	official, (2) insurance age	Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company,	
Ext. Manual Supplier	Telephone 941-496-7828	Signature Date 01/02/2020	711.53
LORIO SORIO	ZIP Code 34293	City State VENICE Florida	
SIATE OF		Address 1380 CAMBRIDGE DRIVE	
Social So	600	Company Name BRUCE LINDH LAND SURVEYOR, INC.	1
DE COMMENT		Title LAND SURVEYOR	
		Certifier's Name License Number BRUCE LINDH P.L.S.#4306	
X Check here if attachments.	×Yes □ No	Were latitude and longitude in Section A provided by a licensed land surveyor?	i i
w to certify elevation information.  3. I understand that any false	architect authorized by la terpret the data available 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.	
ATION	RCHITECT CERTIFIC.	SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION	
NA  feet  meters		<ul> <li>h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support</li> </ul>	
7.3 X feet  meters		g) Highest adjacent (finished) grade next to building (HAG)	
7.5 X feet  meters	×	f) Lowest adjacent (finished) grade next to building (LAG)	1100
NA		<ul> <li>e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)</li> </ul>	
NA			
NA   feet   meters			
NA   feet   meters			
7.60 X feet  meters		<ul> <li>a) Top of bottom floor (including basement, crawlspace, or enclosure floor)</li> </ul>	
	e BFE.	☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source:  Datum used for building elevations must be the same as that used for the BFE	
	elow.	n items a)	
E, AR/A1–A30, AR/AH, AR/AO. Rico only, enter meters.	–V30, V (with BFE), AR, AR/A, AR/AE gram specified in Item A7. In Puerto F Vertical Datum: 1929 NGVD	C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter Benchmark Utilized: COUNTY BENCH MARK SYSTEM  Vertical Datum: 1929 NGVD	1/2
ion*     Finished Construction	☐ Building Under Construction*  building is complete.		-XX-1444-X
REQUIRED)		SECTION C - BUILDING ELEVATION INFORMATION (SURVEY	
Company NAIC Number	ZIP Code C 34293	VENICE FLORIDA	City
Policy Number:	Box No.	Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No /610 られていたい ため	(1)
FOR INSURANCE COMPANY USE		IMPORTANT: In these spaces, copy the corresponding information from Section A	

Check here if attachments.	다 다				
12					
JI.					Comments
	Telephone		Date		Signature
ZIP Code	State		City		Address
		4	me	Property Owner or Owner's Authorized Representative's Name	Property Owner or Own
B, and E for Zone A (without a FEMA-issued or , and E are correct to the best of my knowledge.	Zone A (withour orrect to the I	ctions A, B, and E for a	no completes Se atements in Sec	The property owner or owner's authorized representative who completes Sections A, E community-issued BFE) or Zone AO must sign here. The statements in Sections A, B,	The property owner or community-issued BFE
NOI	CERTIFICAT	REPRESENTATIVE)	(OR OWNER'S	SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION	
ttom floor elevated in accordance with the community's The local official must certify this information in Section G.	accordance w it certify this i	ttom floor elevated in a The local official mus	the top of the bo	Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance?	E5. Zone AO only: If no floodplain manage
above or below the HAG.	_	leet meters		Top of platform of machinery and/or equipment servicing the building is	E4. Top of platform of servicing the build
ove or below the HAG.	ers above or			lop of slab) is	E3. Attached garage (top of slab) is
jes 1–2 of Instructions), ove or □ below the HAG.	or 9 (see pag ers ⊟abc	Section A Items 8 and/	ngs provided in	For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 1–2 of Instructions), the next higher floor (elevation C2.b in  ———————————————————————————————————	E2. For Building Diagrathe next higher floot the diagrams) of the
				Top of bottom floor (including basement, crawlspace, or enclosure) is	<ul> <li>b) Top of bottom floor (including craw/space, or enclosure) is</li> </ul>
elevation is above or below  above or below the HAG.	ner the elevat	te boxes to show whether  The property of the control of the contr	☆ the appropriat ent grade (LAG)	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	E1. Provide elevation information fo the highest adjacent grade (HA) a) Top of bottom floor (including crawlspace, or enclosure) is
LOMR-F request, In Puerto Rico only,	t a LOMA or I	is intended to supportible. Check the measu	If the Certificate	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.	For Zones AO and A (v complete Sections A, B enter meters.
ED)	T REQUIRE	- BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)	TION INFORM AND ZONE A	SECTION E - BUILDING ELEV	
Company NAIC Number	Company	ZIP Code		State	City
URANCE COMPANY USE	FOR INSURANC Policy Number:	n Section A. Route and Box No.	nformation from sldg. No.) or P.O	IMPORTANT: In these spaces, copy the corresponding information from Section A.  Building Street Address (including Apt., Unit, Suite, and/or Bidg. No.) or P.O. Route and Box No.	IMPORTANT: In these Building Street Address
OMB No. 1660-0008 Expiration Date: November 30, 2018	OMB No. Expiration			TIFICATE	ELEVATION CERTIFICATE

# **BUILDING PHOTOGRAPHS**

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. **ELEVATION CERTIFICATE** Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. FOR INSURANCE COMPANY USE

PORO Tage Stage GRIDA ZIP Code 34293 Company NAIC Number Policy Number:

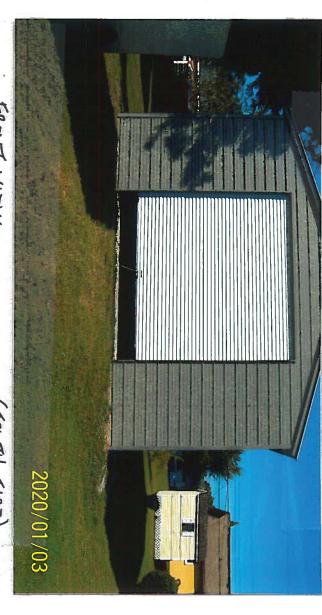
City

JENICE

610

SATURY

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.



FRONT MEIN

Photo One

500 7H SIDE

Photo Two Caption Photo One Caption FRONT E457 SIDE Clear Photo One

## **BUILDING PHOTOGRAPHS**

Continuation Page

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

IMPORTANT: In these spaces, copy the corresponding information from Section A. City Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. VENICE SATURN ROAD State FLOPUDA ZIP Code 500 Policy Number: Company NAIC Number FOR INSURANCE COMPANY USE

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.



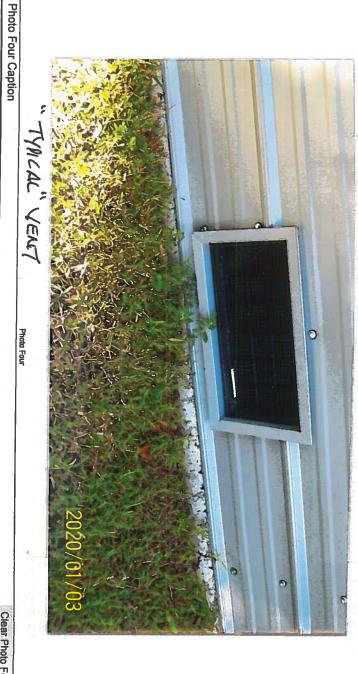
Row

Photo Three

ME 57 SIDE

Photo Three Caption

Clear Photo Three





# ICC-ES Evaluation Report

#### ESR-3560

Reissued September 2019

This report is subject to renewal September 2020.

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

Section: 08 95 43—Vents/Foundation Flood Vents

**DIVISION: 08 00 00—OPENINGS** 

A Subsidiary of the International Code Council®

REPORT HOLDER:

FLOOD FLAPS®, LLC

**EVALUATION SUBJECT:** 

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

### 1.0 EVALUATION SCOPE

## Compliance with the following codes:

- **2018**, Code® (IBC) 2015, 2012 and 2009 International Building
- 2018, 2015, Code® (IRC) 2012 and 2009 International Residential

#### Properties evaluated:

- Physical operation
- Water flow
- Weathering

walls. Certain models also allow natural ventilation. the equalization of hydrostatic flood forces on exterior Flood Flaps® automatic flood vents are used to provide for

#### DESCRIPTION

#### 3.1 General:

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 allow flood waters to enter and exit enclosed areas. The FVs are constructed of ABS plastic which serves as the Flood Flaps® automatic flood vents series as described in Section 3.3. metal screen FV's housing, and a front grill that contains an anodized mechanically operated flood vents (FVs) that automatically imbedded in polypropylene plastic. are engineered 9

close 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. manner as the grill, the two rubber flaps are pushed open conditioned areas or sealed crawl spaces. In the The sealed series models contain two rubber flaps that the FV to the passage of air when using with same

### **Engineered Opening:**

installed in accordance with Section 4.0. comply with the eng ASCE/SEI 24, Flood of rise and fall of 5 feet per hour (0.423 mm/s). In order to principle noted in Sections 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 (2018 and 2015 IBC and IRC) [Section 2.6.2.2 of ASCE/SEI 24-05 (2012 and 2009 IBC and IRC)] for a rate The Flood Flaps® automatic FVs comply with the design engineered lood Flaps® automatic FVs must be opening requirement 으

## 3.3 Flood Vent Series Models:

The sealed series models, designated FFWF, include two rubber flaps for the prevention of air flow. The multi-purpose series, designated FFNF, omits the rubber flaps. Flood Flaps® automatic FVs are available in two series with multiple models and sizes as described in Table

#### 3.4 Natural Ventilation:

ventilation for under-floor ventilation. Flood Flaps® automatic FV models FFWF12, FFWF08, and FFWF05 Flood Flaps® automatic FV models FFNF12, FFNF08, FFNF05, and FFNF02 have metal screens with ¼ inch by ¼ inch (6 mm by 6 mm) openings and provide 37 square inches (0.02 m²) of net free opening to supply natural floor ventilation. have not been evaluated for use as openings for under-

#### 40 **DESIGN AND INSTALLATION**

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 (2018 and 2015 IBC and IRC) [Section instructions, the applicable code and this report. Flood Flaps® automatic FVs can be installed in wood, masonry the FVs must be in accordance with the manufacturer's into walls of existing or new construction. Flood Flaps® automatic FVs are designed to be installed the Flood Flaps® FVs must be installed as follows: 2.6.2.2 of ASCE/SEI 24-05 (2012 and 2009 IBC and IRC)] Installation of

- 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 m<sup>2</sup>) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located 12 inches (305 mm) above grade נם maximum 으

## 5.0 CONDITIONS OF USE

report comply with, or are suitable alternatives to what is The Flood Flaps® automatic flood vents described in this





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<sup>®</sup> 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.

7.2 The report holder's contact information is the following:

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

## **6.0 EVIDENCE SUBMITTED**

Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015 (editorially revised October 2017).

#### 7.0 IDENTIFICATION

7.1 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

NUMBER	MODEL	ROUGH OPENING (Width X Height) (inches)	VENT SIZE (W X H X D) (inches)	ENCLOSED AREA COVERAGE (ft')	NET FREE AREA OPENING <sup>1</sup> (In <sup>2</sup> )
FFWF12	Sealed Series	16 x 8	15 <sup>5</sup> / <sub>8</sub> × 7 <sup>3</sup> / <sub>4</sub> × 12	220	NA
FFNF12	Multi-Purpose	16 x 8	15 <sup>5</sup> / <sub>8</sub> X 7 <sup>3</sup> / <sub>4</sub> X 12	220	37
FFWF08	Sealed Series	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 8	220	NA
FFNF08	Multi-Purpose	16 x 8	$15^{5}/_{6} \times 7^{3}/_{4} \times 8$	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 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 5	220	37

For SI: 1 inch = 25.4 mm;  $1 \text{ ff} = 0.093 \text{ m}^2$ 

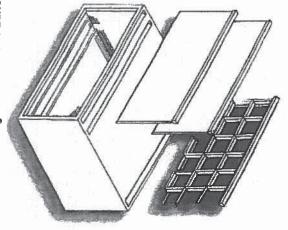


FIGURE 1-FLOOD FLAPS® AUTOMATIC FLOOD VENT

For under-floor ventilation only.

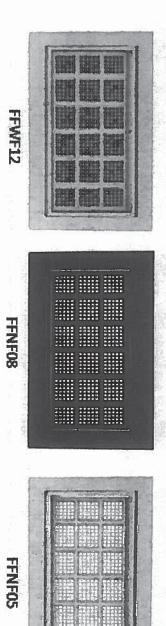


FIGURE 2—FLOOD FLAPS® AUTOMATIC FLOOD VENT SERIES MODELS





# ICC-ES Evaluation Report

# ESR-3560 FBC Supplement

This report is subject to renewal September 2020 Reissued September 2019

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

Subsidiary of the International Code Council®

DIVISION: 08 00 00—OPENINGS
Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

FLOOD FLAPS®, LLC

**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:

- 2017 Florida Building Code--Building
- 2017 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 2015 *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, reissued September 2019