## **ELEVATION CERTIFICATE**

OMB No. 1660-0008 Expiration Date: November 30, 2022

				THE RESERVE OF THE PERSON NAMED IN	THE RESIDENCE OF THE PARTY OF T		
IMPORTANT: In these spaces, copy the corresponding information from Section A.					FOR INSURANCE COMPANY USE		
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 1888 Bayshore Drive					Policy Number:		
City Englewood	State Florida	ZIP Code 34223		Company NA	IC Number		
SECTIO	N G - COMMUNITY	NFORMATION (OPTIO	NAL)		- v		
The local official who is authorized by law or ord Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, ent	Certificate. Complete	the community's floodpla the applicable item(s) a	ain mar nd sign	nagement ordir below. Check	nance can complete the measurement		
G1. The information in Section C was take engineer, or architect who is authorized data in the Comments area below.)	en from other docume ed by law to certify ele	ntation that has been signation information. (Indi	gned ar	nd sealed by a e source and d	licensed surveyor, late of the elevation		
G2. A community official completed Section or Zone AO.	on E for a building loca	ated in Zone A (without a	a FEMA	A-issued or cor	nmunity-issued BFE)		
G3.  The following information (Items G4-	G10) is provided for c	ommunity floodplain mai	nageme	ent purposes.	Ki		
G4. Permit Number	G5. Date Permit Iss	ued		Date Certificate Compliance/Oc	of cupancy Issued		
19-170988 BA				, , , ,			
G7. This permit has been issued for:	New Construction	Substantial Improven	nent				
G8 Elevation of as-built lowest floor (including of the building:	basement)		☐ fee	t meters	Datum		
G9. BFE or (in Zone AO) depth of flooding at the	he building site:		☐ fee	t meters	Datum		
G10. Community's design flood elevation:		10	☐ fee	t 🗌 meters	Datum		
Local Official's Name		Title					
Community Name		Telephone					
Signature		Date					
Comments (including type of equipment and loc	ation, per C2(e), if ap	plicable)					
					8		
JOB# 20-1484				☐ Ch	eck here if attachments.		

# **ELEVATION CERTIFICATE**

OMB No. 1660-0008

Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the corresponding in	FOR INSURANCE COMPANY USE							
Building Street Address (including Apt., Unit, Suite, and/or Bl 1888 Bayshore Drive	Policy Number:							
City State Englewood Flo	rida	ZIP Code 34223	Company NAIC Number					
SECTION E – BUILDING ELEVAT FOR ZONE AO			T REQUIRED)					
For Zones AO and A (without BFE), complete Items E1–E5. complete Sections A, B,and C. For Items E1–E4, use na only, enter meters.	If the Certificate intural grade, if av	s intended to support allable. Check the me	a LOMA or LOMR-F request, asurement used. In Puerto Rico					
E1. 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).								
<ul> <li>a) Top of bottom floor (including basement, crawlspace or enclosure) is</li> </ul>	, <u>N/A</u>	☐ feet ☐ meter	s ☐ above or ☐ below the HAG.					
<ul> <li>b) Top of bottom floor (including basement, crawlspace, or enclosure) is</li> </ul>	N/A	☐ feet ☐ meter	s ☐ above or ☐ below the LAG.					
E2. For Building Diagrams 6-9 with permanent flood opening	gs provided in Se	ction A Items 8 and/o	r 9 (see pages 1–2 of Instructions),					
the next higher floor (elevation C2.b in the diagrams) of the building is	<u>N/A</u>	☐ feet ☐ meter	s □ above or □ below the HAG.					
E3. Attached garage (top of slab) is	N/A	☐ feet ☐ meter	s ☐ above or ☐ below the HAG.					
E4. Top of platform of machinery and/or equipment servicing the building is	<u>N/A</u>	☐ feet ☐ meter	s ☐ above or ☐ below the HAG.					
E5. Zone AO only: If no flood depth number is available, is the floodplain management ordinance? ☐ Yes ☐ No	ne top of the botte	om floor elevated in a The local official must	ccordance with the community's certify this information in Section G.					
SECTION F - PROPERTY OWNER (	OR OWNER'S F	EPRESENTATIVE)	CERTIFICATION					
The property owner or owner's authorized representative wh community-issued BFE) or Zone AO must sign here. The sta	o completes Sec atements in Secti	tions A, B, and E for 2 ons A, B, and E are c	Zone A (without a FEMA-issued or prrect to the best of my knowledge.					
Property Owner or Owner's Authorized Representative's Nar	ne							
Address	City	St	ate ZIP Code					
Signature	Date	To	elephone					
Comments	<del></del>							
JOB# 20-1484			☐ Check here if attachments.					

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

,

OMB No. 1660-0008

Expiration Date: November 30, 2022

# **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.

OLO HOLL THE THE CHARLES						FOR INSURANCE COMPANY USE	
A1. Building Owner's Name Michael Woolf					Policy Numb	oer:	
A2. Building Street Address (inc Box No.	cluding Apt., Unit, Suite,	and/or	Bldg. No.) or	P.O. Route and	Company N	AIC Number:	
1888 Bayshore Drive			State		ZIP Code		
City Englewood				rida		223	
A3. Property Description (Lot as Lot 924, Englewood Gard					)		
A4. Building Use (e.g., Residen	tial, Non-Residential, Ad	ddition,	Accessory, e	tc.) <u>Detached</u>	d Garage		
A5. Latitude/Longitude: Lat. 2	7°00'10.7" N. Lo	ng. <u>08</u> 2	2°24'02.8" V	V. Horizontal	Datum: NAD	1927 🛛 NAD 1983	
A6. Attach at least 2 photograph	ns of the building if the C	Certificat	te is being us	ed to obtain flood i	nsurance.		
A7. Building Diagram Number	<u>1A</u>						
A8. For a building with a crawls	pace or enclosure(s):						
a) Square footage of crawls	space or enclosure(s)	1316	sqft				
b) Number of permanent flo	ood openings in the craw	vispace	or enclosure	s) within 1.0 foot a	bove adjacent grad	le <u>6</u>	
c) Total net area of flood or			) sq in		, ,		
d) Engineered flood openin		<u></u> No					
A9. For a building with an attach		10					
_							
a) Square footage of attach				0 foot about adia.		N/A	
b) Number of permanent flo	. •	_	rage within i	U 100t above aujat	ent grade	<u>IN/A</u>	
c) Total net area of flood op		·					
d) Engineered flood openin							
SI	ECTION B - FLOOD IN	ISURA	NCE RATE	MAP (FIRM) INF	DRMATION		
B1. NFIP Community Name & 0	Community Number		B2. County	Name		B3. State	
Sarasota Co	unty 125144			Sarasota		Florida	
B4. Map/Panel B5. Suffix Number	B6. FIRM Index Date	Effe	RM Panel ective/ vised Date	B8. Flood Zone(s)	B9. Base Flood E (Zone AO, use	levation(s) Base Flood Depth) 11 feet	
12115C-0344 F	11/04/2016		4/2016	AE		T I IGGE	
B10. Indicate the source of the B	Base Flood Elevation (B	FE) dat	a or base floo	d depth entered ir	Item B9:		
☐ FIS Profile   ☑ FIRM [	Community Determin	ned [	ີ່ Other/Soເ	ırce:			
B11. Indicate elevation datum u	sed for BFE in Item B9:	□ NG	SVD 1929 🛭	NAVD 1988	Other/Source:		
B12. Is the building located in a	Coastal Barrier Resource	ces Sys	stem (CBRS)	area or Otherwise	Protected Area (Ol	PA)? 🗌 Yes 🔀 No	
Designation Date:			СВР	S 🗌 OPA			

# **ELEVATION CERTIFICATE**

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the corresponding information from Section A. FC					FOR INSURANCE COMPANY USE				
					Policy Number:				
1888 Bayshore Drive City State	ZIP C	- Codo			Compon	y NAIC Nu	mhor		
City State Englewood Florida	ZIP	3422	23		Jumpan	y INAIC INU	mbei		
SECTION C - BUILDING ELE	VATION INF	ORMATI	ON (SURVE	EY REC	QUIREC	))			
C1. Building elevations are based on: Construction	Drawings*	☐ Buildi	ng Under Co	onstruc	tion*	⊠ Finishe	d Constru	ıction	
*A new Elevation Certificate will be required when cons C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), V Complete Items C2.a–h below according to the buildi Benchmark Utilized N.G.S./ F.D.E.P. SAR24	/E, V1–V30, V ng diagram sp	(with BFE	E), AR, AR/A Item A7. In F					۸O.	
	Indicate elevation datum used for the elevations in items a) through h) below.  ☐NGVD 1929 ☑ NAVD 1988 ☐ Other/Source:								
Datum used for building elevations must be the same	as that used	for the BFI	Ξ.						
<ul> <li>a) Top of bottom floor (including basement, crawlspath)</li> <li>b) Top of the next higher floor</li> <li>c) Bottom of the lowest horizontal structural membered</li> <li>d) Attached garage (top of slab)</li> <li>e) Lowest elevation of machinery or equipment service (Describe type of equipment and location in Common floor to Lowest adjacent (finished) grade next to building (global Highest adjacent (finished) grade next to building (global Highest adjacent grade at lowest elevation of deck structural support</li> <li>SECTION D – SURVEYOR,</li> <li>This certification is to be signed and sealed by a land sure a location of the certificate represents statement may be punishable by fine or imprisonment unit were latitude and longitude in Section A provided by a lice</li> </ul>	(V Zones only cing the buildinents) (LAG) (HAG) or stairs, incluence of the control of the contr	or ARCH er, or archits to interpode, Section	ITECT CE	ed by I	EATION aw to cele. I und	feet	meters	nation. se	
Certifier's Name	License Num	nber							
Alan K. Fish, PSM		LS 39	41		-	•	٠.		
Title Professional Surveyor & Mapper  Company Name Van Buskirk / Fish & Associates, Inc.						Pla Se	ace eal	Section of the second	
Address 12450 Tamiami Trail						He	ere		
City North Port	State Florida		ZIP Code 34287						
Signature	Date 10/27/		Telephone (941) 426	6-0681	Ext.				
Copy all pages of this Elevation Certificate and all attachmen	nts for (1) com	munity offic	cial, (2) insura	ance ag	ent/com	pany, and	(3) buildin	g owner.	
Comments (including type of equipment and location, per This Certificate is for the Detached Garage / Storage Build are Flood Flaps, LLC. model # FFWF08 rated at 220 inche Certificate is based on the building conditions at time of su require an updated Elevation Certificate. Certificate is valid	ing located at s each (ICC-E rvey. Any buil	1888 Bays ES Report ding revision	attached). Tons affecting	he Info	mation   ms repo	provided in rted in this	this Eleva	ation	
Job# 20-1484									

#### BUILDING PHOTOGRAPHS

### **ELEVATION CERTIFICATE**

See Instructions for Item A6.

OMB No. 1660-0008

Expiration Date: November 30, 2022

IMPORTANT: In these spaces, cop	by the corresponding information	from Section A	FOR INSURANCE COMPANY USE
Building Street Address (including A			Policy Number:
1888 Bayshore Drive			
City Englewood	State Florida	ZIP Code 34223	Company NAIC Number

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 1 Caption

Front View

Date Taken 10/26/20



Photo 2 Caption

Rear View

JOB# 20-1484

Date Taken 10/26/20

### **BUILDING PHOTOGRAPHS**

**ELEVATION CERTIFICATE** 

Continuation Page

OMB No. 1660-0008 Expiration Date: November 30, 2022

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.

1888 Bayshore Drive

City
State
Englewood

State
Florida

State
SIP Code
Florida

34223

FOR INSURANCE COMPANY USE

FOR INSURANCE COMPANY USE

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.

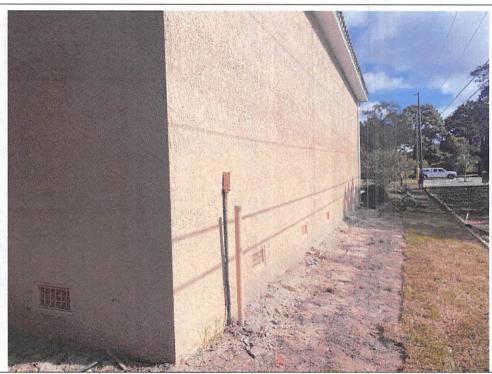


Photo 3 Caption Left View Date Taken 10/26/20



Photo 4 Caption Right View JOB# 20-1484 Date Taken 10/26/20

### **BUILDING PHOTOGRAPHS**

Continuation Page

OMB No. 1660-0008

Page Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the	FOR INSURANCE COMPANY USE		
Building Street Address (including Apt., U	Policy Number:		
1888 Bayshore Drive			
City	State	ZIP Code	Company NAIC Number
Englewood	Florida	34223	

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 5 Caption | Engineered vent cover: Flood Flaps, LLC. model # FFWF08 Typical

JOB# 20-1484

Date Taken 10/26/20

Photo 6 Caption

JOB# 20-1484

Date Taken

**ELEVATION CERTIFICATE** 



# **ICC-ES Evaluation Report**

ESR-3560

Reissued September 2019

This report is subject to renewal September 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 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, 2015, 2012 and 2009 International Building Code® (IBC)
- 2018, 2015, 2012 and 2009 International Residential Code® (IRC)

#### Properties evaluated:

- Physical operation
- Water flow
- Weathering

#### 2.0 USES

Flood Flaps® automatic flood 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:

Flood Flaps® automatic 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 FV's 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 FVs are available in two series as described in Section 3.3.

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® automatic FV.

#### 3.2 Engineered Opening:

The Flood Flaps® automatic FVs comply with the 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 2.6.2.2 of ASCE/SEI 24-05 (2012 and 2009 IBC and IRC)] 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® automatic FVs must be installed in accordance with Section 4.0.

#### 3.3 Flood Vent Series Models:

Flood Flaps® automatic FVs are available in two series with multiple models and sizes as described in Table 1. The sealed series models, designated FFWF, include two rubber flaps for the prevention of air flow. The multipurpose series, designated FFNF, omits the rubber flaps.

#### 3.4 Natural Ventilation:

Flood Flaps® automatic FV models FFNF12, FFNF08, FFNF05, and FFNF02 have metal screens with ½ 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 ventilation for under-floor ventilation. Flood Flaps® automatic 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® automatic 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® automatic 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 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)], 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® automatic 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<sup>®</sup> 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.

#### 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). 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

### TABLE 1—FLOOD FLAP AUTOMATIC FLOOD VENT MODEL SIZES

MODEL NUMBER	MODEL DESIGNATION	ROUGH OPENING (Width X Height) (inches)	VENT SIZE (W X H X D) (inches)	ENCLOSED AREA COVERAGE (ft²)	NET FREE AREA OPENING <sup>1</sup> (in <sup>2</sup> )
FFWF12	Sealed Series	16 x 8	15 <sup>5</sup> / <sub>8</sub> X 7 <sup>3</sup> / <sub>4</sub> X 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	$15^5/_8 \times 7^3/_4 \times 8$	220	NA
FFNF08	Multi-Purpose	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 8	220	37
FFWF05	Sealed Series	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 5	220	NA
FFNF05	Multi-Purpose	16 x 8	$15^{5}/_{8} \times 7^{3}/_{4} \times 5$	220	37

For SI: 1 inch = 25.4 mm;  $1 f^2 = 0.093 m^2$ 

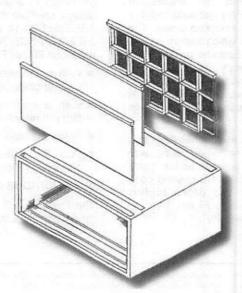


FIGURE 1-FLOOD FLAPS® AUTOMATIC FLOOD VENT

<sup>&</sup>lt;sup>1</sup>For under-floor ventilation only.

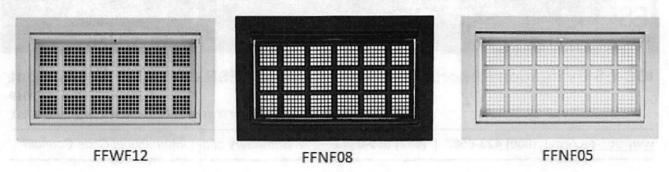


FIGURE 2—FLOOD FLAPS® AUTOMATIC FLOOD VENT SERIES MODELS

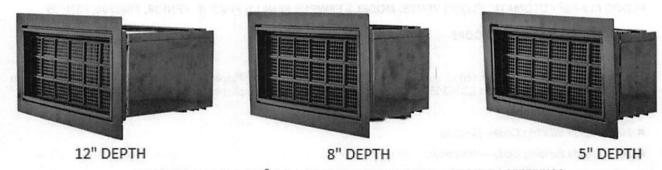


FIGURE 3—FLOOD FLAPS® AUTOMATIC FLOOD VENTS MULTIPLE DEPTH OFFERINGS



# **ICC-ES Evaluation Report**

# ESR-3560 FBC Supplement

Reissued September 2019 This report is subject to renewal September 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 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.

