# U.S. DEPARTMENT 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.

SE	CTION A - PROPERTY	INFORI	MATION		FOR INSUR	ANCE COMPANY USE	
A1. Building Owner's Name						oer:	
Scott Paymer							
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.					Company N	AIC Number:	
223 N. Nassau Avenue	223 N. Nassau Avenue						
City			State New Jers	eev.	ZIP Code 08402		
Margate	I Die J. Merchans Ta	Davad		-			
A3. Property Description (Lot Block 414, Lot 1	and Block Numbers, Ta	x Paicei	Number, Leg	gai Description, etc			
A4. Building Use (e.g., Resid	ential, Non-Residential,	Addition,	Accessory, e	etc.) Residentia	l		
A5. Latitude/Longitude: Lat.	39° 19'48.5" N	Long. 74	4° 30' 33.6" W	/Horizontal	Datum: NAD 1	927 🗵 NAD 1983	
A6. Attach at least 2 photogra	aphs of the building if the	e Certific	ate is being u	sed to obtain floo	d insurance.		
A7. Building Diagram Numbe	r7						
A8. For a building with a craw	/ispace or enclosure(s):						
a) Square footage of cra	wlspace or enclosure(s)	***************************************		875.00 sq ft			
b) Number of permanent	flood openings in the cr	awlspace	e or enclosure	e(s) within 1.0 foot	above adjacent gra	ade <u>5</u>	
c) Total net area of flood	openings in A8.b	1	250.00 sq in	ı			
d) Engineered flood oper	nings? 🗵 Yes 🗌 N	10					
A9. For a building with an atta	ched garage:						
a) Square footage of atta	ched garage		00.00 sq ft				
b) Number of permanent					acent grade 0		
c) Total net area of flood							
d) Engineered flood oper	nings? ☐ Yes 🖾 N	4o					
ay Engineerica need apar							
	SECTION B - FLOOD	INSURA	NCE RATE	MAP (FIRM) INF	ORMATION		
B1. NFIP Community Name 8	Community Number		B2. County	Name		B3. State	
Margate City 345304			Atlantic			New Jersey	
B4. Map/Panel B5. Suffi.	x B6. FIRM Index Date	Eff	RM Panel ective/	B8. Flood Zone(s)	B9. Base Flood E (Zone AO, us	levation(s) e Base Flood Depth)	
345304/0434 F	08-28-2018	08-28-	vised Date 2018	AE	8.00'		
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 X 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				
1							

# ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the	·····	FOR INSURANCE COMPANY USE			
Building Street Address (including Apt., Ur 223 N. Nassau Avenue	Policy Nun				
City	State ZIP 0	Code	Company	NAIC Number	
Margate	New Jersey 0840	)2			
SECTION C -	BUILDING ELEVATION INFORMAT	ION (SURVEY R	EQUIRED)		
C1. Building elevations are based on:  *A new Elevation Certificate will be r	☐ Construction Drawings* ☐ Build equired when construction of the building		uction* 🔀	Finished Construction	
C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.					
Benchmark Utilized: Local	Vertical Datum:				
Indicate elevation datum used for the	e elevations in items a) through h) below	N.			
☐ NGVD 1929 🕱 NAVD 1	988 Other/Source:				
Datum used for building elevations r	nust be the same as that used for the B	FE.	Check	the measurement used.	
Tan of bottom floor (including ba	sement, crawlspace, or enclosure floor)		5.5 X		
	germent, ordaniopado, or orialidad inter-		14.4 ×	feet  meters	
b) Top of the next higher floor	the state of the s	<u></u>	N/A 🗵		
c) Bottom of the lowest horizontal s	tructural member (V Zones only)		5.4		
d) Attached garage (top of slab)				1	
e) Lowest elevation of machinery o (Describe type of equipment and	r equipment servicing the building location in Comments)		14.5		
f) Lowest adjacent (finished) grade	next to building (LAG)		5.3		
g) Highest adjacent (finished) grade	e next to building (HAG)		<u>5.4</u> $\times$	feet meters	
h) Lowest adjacent grade at lowest structural support	elevation of deck or stairs, including		5.4 ×	☐ feet ☐ meters	
SECTION D	– SURVEYOR, ENGINEER, OR ARC	CHITECT CERTIF	ICATION	-	
This certification is to be signed and sea I certify that the information on this Certification statement may be punishable by fine or	heate renresents my nest ellotts to titlet	Diet tile data avali	y law to cen able. I unde	tify elevation information erstand that any false	
Were latitude and longitude in Section A	provided by a licensed land surveyor?	⊠Yes □No	☐ Ch	eck here if attachments.	
Certifier's Name	License Number				
Thomas A. Prendergast	GS37604				
Title Professional Land Surveyor				Plade//	
Company Name Prendergast & Associates, LLC			This	AS A Strait of	
Address 318 Discovery Lane				Here	
City Egg Harbor Township	State New Jersey	ZIP Code 08234			
Signature Thanks Shally	Date 04-12-2023	Telephone (609) 653-2047	Ext.		
Copy all pages of this Elevation Captificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.					
Comments (including type of equipment A8.(b) Freedom Flood Vent; Model FFV-C2.(e) Air Condition Compressor.	and location, per C2(e), if applicable) 1608				

# ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the correspor	FOR INSURANCE COMPANY USE				
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.  223 N. Nassau Avenue  Policy Number:					
City Margate	State New Jersey	ZIP Code 08402	Company NAIC Number		
SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)					
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.  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).					
a) Top of bottom floor (including basement, crawlspace, or enclosure) is	***************************************	feet	rs 🔲 above or 🔲 below the HAG.		
<ul> <li>Top of bottom floor (including basement, crawlspace, or enclosure) is</li> </ul>		feet	rs 🔲 above or 🔲 below the LAG.		
<ul><li>E2. For Building Diagrams 6–9 with permanent flood the next higher floor (elevation C2.b in the diagrams) of the building is</li><li>E3. Attached garage (top of slab) is</li></ul>	d openings provided in S	Section A Items 8 and/or	above or below the HAG.		
E4. Top of platform of machinery and/or equipment servicing the building is		feet	rs		
E5. Zone AO only: If no flood depth number is availa floodplain management ordinance? Yes	able, is the top of the bo	ottom floor elevated in ac	handle handle		
SECTION F - PROPERTY O	WNER (OR OWNER'S	REPRESENTATIVE) CI	ERTIFICATION		
The property owner or owner's authorized represents community-issued BFE) or Zone AO must sign here.	ative who completes Se The statements in Sec	ections A, B, and E for Zo tions A, B, and E are co	one A (without a FEMA-issued or rect to the best of my knowledge.		
Property Owner or Owner's Authorized Representation	ve's Name		· ·		
Address	City	St	ate ZIP Code		
Signature	Date	Te	elephone		
Comments					
			Check here if attachments.		

# **ELEVATION CERTIFICATE**

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

TO DESCRIPTION OF THE PROPERTY						
IMPORTANT: In these spaces, copy the corr	FOR INSURANCE COMPANY USE					
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.  Policy Number:  223 N. Nassau Avenue						
City	State	ZIP Code	Company NAIC Number			
Margate	New Jersey	08402				
SECTION	ON G – COMMUNIT	Y INFORMATION (OPTIC	DNAL)			
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.						
engineer, or architect who is authorized data in the Comments area below.)	ed by law to certify	elevation information. (Inc	igned and sealed by a licensed surveyor, licate the source and date of the elevation			
G2. A community official completed Sector Zone AO.	ion E for a building l	located in Zone A (without	a FEMA-issued or community-issued BFE)			
G3.  The following information (Items G4-	-G10) is provided fo	or community floodplain ma	anagement purposes.			
G4. Permit Number	G5. Date Permit	Issued	G6. Date Certificate of Compliance/Occupancy Issued			
G7. This permit has been issued for:	New Construction	n 🗌 Substantial Improver	nent			
G8. Elevation of as-built lowest floor (includin of the building:	g basement) –	- Company of the Comp	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				
10 to the line to the efficient and location, per C2(a), if applicable						
Comments (including type of equipment and location, per C2(e), if applicable)						
			Check here if attachments.			

### **BUILDING PHOTOGRAPHS**

**ELEVATION CERTIFICATE** 

See Instructions for Item A6.

OMB No. 1660-0008

Expiration Date: November 30, 2022

IMPORTANT: In these spaces, cop	FOR INSURANCE COMPANY USE		
Building Street Address (including A 223 N. Nassau Avenue	Policy Number:		
City Margate	State New Jersey	ZIP Code 08402	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.

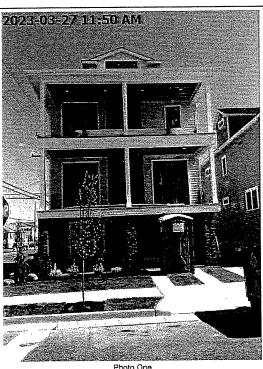


Photo One

Front View Photo One Caption

Clear Photo One

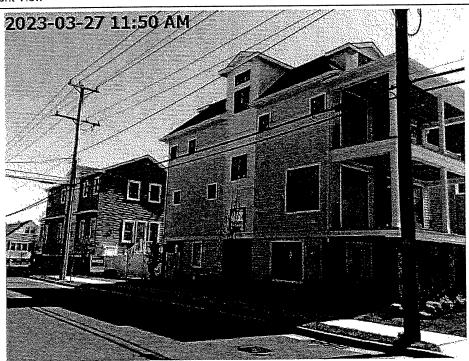


Photo Two

Left Side View Photo Two Caption

Clear Photo Two

#### **BUILDING PHOTOGRAPHS**

# **ELEVATION CERTIFICATE**

Continuation Page

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

IMPORTANT: In these spaces, copy the co	FOR INSURANCE COMPANY USE		
Building Street Address (including Apt., Unit, 223 N. Nassau Avenue	Policy Number:		
City Margate	State New Jersey	ZIP Code 08402	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.

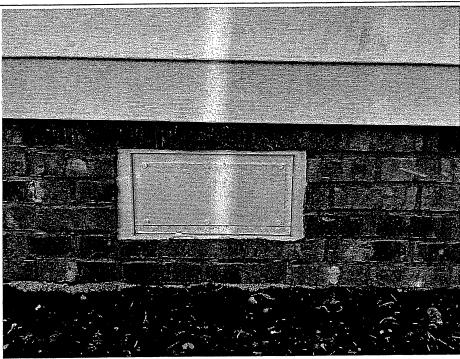


Photo Three

Photo Three Caption Flood Vent

Clear Photo Three

**Photo Four** 

Photo Four

Photo Four Caption

Clear Photo Four











Reissued March 2022

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This report is subject to renewal March 2024.

# **ICC-ES Evaluation Report**

**ESR-4332** 

**DIVISION: 08 00 00—OPENINGS** 

Section: 08 95 43—Vents / Foundation Flood Vents

REPORT HOLDER:

SMART PRODUCT INNOVATIONS, INC.

**EVALUATION SUBJECT:** 

FREEDOM FLOOD VENT™ AUTOMATIC FOUNDATION FLOOD VENT: MODEL FFV-1608

#### 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012, 2009 and 2006 International Building Code<sup>®</sup> (IBC)
- 2021, 2018, 2015, 2012, 2009 and 2006 International Residential Code® (IRC)

#### Properties evaluated:

- Physical operation
- Water flow
- Weathering

#### **2.0 USES**

The model FFV–1608 Freedom Flood Vent™ is used to equalize hydrostatic pressure on walls of enclosures subject to rising or falling floodwaters. With the cover removed, the model FFV-1608 also provides natural air ventilation.

#### 3.0 DESCRIPTION

#### 3.1 General:

The model FFV-1608 Freedom Flood Vent<sup>™</sup> is an engineered mechanically operated in-wall flood vent (FV) that automatically allows floodwater to enter an enclosed area and exit. The FV is comprised of a polycarbonate frame with mounting flange and a polycarbonate horizontally pivoting door. When subjected to rising water, the model FFV-1608 Freedom Flood Vent<sup>™</sup> door is activated and pivots to allow water and debris to flow in either direction to equalize hydrostatic pressure from one side of the enclosure to the other. The FV features a removable polycarbonate cover. The FV door will activate and pivot when subjected to rising water with or without the polycarbonate cover installed.

# 3.2 Engineered Opening:

The FV complies with the design principle noted in Section 2.7.2.2 and Section 2.7.3 of ASCE/ SEI 24-14 (2021, 2018 and 2015 IBC and IRC) [Section 2.6.2.2 of ASCE/ SEI 24-05 (2012, 2009, 2006 IBC and IRC)] for a maximum rate of rise and fall of 5.0 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/ SEI 24, Freedom Flood Vent™ FVs must be installed in accordance with Section 4.0 below. See Table 1 for vent size and maximum allowable area coverage for a single vent.

#### 4.0 DESIGN AND INSTALLATION

The model FFV-1608 Freedom Flood Vent™ is designed to be installed into walls or overhead doors of existing or new construction. Installation of the vent 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 Sections 2.7.2.2 and 2.7.3 of ASCE/ SEI 24-14 (2021, 2018 and 2015 IBC and IRC) [Section 2.6.2.2 of ASCE/ SEI 24-05 (2012, 2009, 2006 IBC and IRC)], the Freedom Flood Vent™ 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 250 square feet (23.2 m²) of enclosed area.
- Below the base flood elevation.
- With the bottom of the vent located a maximum of 12 inches (305.4 mm) above the higher of the final interior grade or floor and the finished exterior grade immediately under each opening.

#### 5.0 CONDITIONS OF USE

The Freedom Flood Vent<sup>™</sup> 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 model FFV-1608 Freedom Flood Vent<sup>™</sup> unit must be installed in accordance with this report, the applicable code and the manufacturer's published installation instructions. In the event of a conflict, the instructions in this report shall govern.
- **5.2** The model FFV-1608 Freedom Flood Vent™ unit 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.

**5.3** Use of the Freedom Flood Vent as under-floor space ventilation is outside the scope of this report.

#### 6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015 (editorially revised February 2021).

#### 7.0 IDENTIFICATION

7.1 The Freedom Flood Vent™ model described in this report must be identified by a label bearing the manufacturer's name (Smart Product Innovations, Inc.) and the evaluation report number (ESR-4332).

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

SMART PRODUCT INNOVATIONS, INC. 430 ANDBRO DRIVE, UNIT 1
PITMAN, NEW JERSEY 08071
(800) 507-1527
www.freedomfloodvent.com
info@freedomfloodvent.co

TABLE 1—FREEDOM FLOOD VENT™

MODEL NAME MODEL NUMBER		MODEL SIZE	COVERAGE (sq. ft.)
Freedom Flood Vent™	FFV-1608	15 <sup>3</sup> / <sub>4</sub> " X 8 <sup>1</sup> / <sub>16</sub> "	250

For SI: 1 inch = 25.4 mm

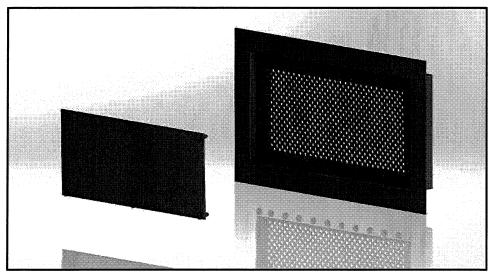


FIGURE 1—MODEL FFV-1608 FREEDOM FLOOD VENT™: SHOWN WITH COVER REMOVED

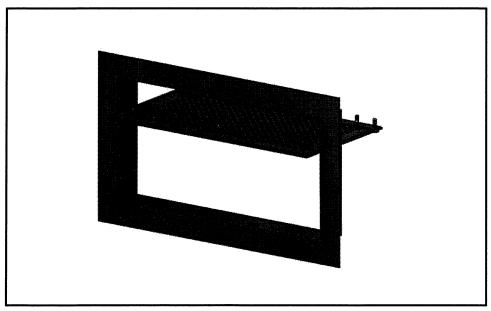


FIGURE 2—MODEL FFV-1608 FREEDOM FLOOD VENT™: SHOWN WITH FLOOD DOOR PIVOTED OPEN



## **ICC-ES Evaluation Report**

## **ESR-4332 CBC and CRC Supplement**

Reissued March 2022

This report is subject to renewal March 2024.

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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:

SMART PRODUCT INNOVATIONS, INC.

**EVALUATION SUBJECT:** 

FREEDOM FLOOD VENT™ AUTOMATIC FOUNDATION FLOOD VENT: MODEL FFV-1608

#### 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that the Freedom Flood Vent™ Automatic Foundation Flood Vent: Model FFV-1608, described in ICC-ES evaluation report ESR-4332, has also been evaluated for compliance with codes noted below.

#### Applicable code editions:

■ 2019 California Building Code (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Planning and Development (OSHPD) and Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

■ 2019 California Residential Code (CRC)

#### 2.0 CONCLUSIONS

#### 2.1 CBC:

The Freedom Flood Vent™ Automatic Foundation Flood Vent: Model FFV-1608, described in Sections 2.0 through 7.0 of the evaluation report ESR-4332, complies with CBC Chapter 12 provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 12 and 16, as applicable.

- 2.1.1 OSHPD: The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.
- 2.1.2 DSA: The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

#### 2.2 CRC:

The Freedom Flood Vent™ Automatic Foundation Flood Vent: Model FFV-1608, described in Sections 2.0 through 7.0 of the evaluation report ESR-4332, complies with the 2019 CRC, provided the design and installation are in accordance with the 2018 International Residential Code® (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued March 2022.





# **ICC-ES Evaluation Report**

### **ESR-4332 FBC Supplement**

Reissued March 2022

This report is subject to renewal March 2024.

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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:

SMART PRODUCT INNOVATIONS, INC.

**EVALUATION SUBJECT:** 

FREEDOM FLOOD VENT™ AUTOMATIC FOUNDATION FLOOD VENT: MODEL FFV-1608

#### 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that Freedom Flood Vent™ Automatic Foundation Flood Vent: Model FFV-1608, described in ICC-ES evaluation report ESR-4332, has also been evaluated for compliance with the codes noted below.

#### Applicable code editions:

- 2020 Florida Building Code—Building
- 2020 Florida Building Code—Residential

#### 2.0 CONCLUSIONS

The Freedom Flood Vent™ Automatic Foundation Flood Vent: Model FFV-1608, described in Sections 2.0 through 7.0 of the evaluation report ESR-4332, complies with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, provided the design requirements are determined in accordance with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-4332 for the 2018 *International Building Code®* (IBC) meet the requirements of *Florida Building Code—Building* and the *Florida Building Code—Residential*, as applicable.

Use of the Freedom Flood Vent™ Automatic Foundation Flood Vent: Model FFV-1608 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 61G20-3, 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 evaluation report, reissued March 2022.

