## 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.

SECTION A – PROPERTY INFORMATION F						FOR INSUR	RANCE COMPANY USE		
A1. Building Owner's Name BRUNO IZZO JR 20-76846						Policy Numb	per:		
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.  1665 CHAPLINE LN  Company NAIC Number:									
City SARASOTA		<u> </u>		State Florida		ZIP Code 34231			
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)  PARCEL ID- 0109040007  NOT FOR CONSTRUCTION, DESIGN OR TITLE TRANSFER									
	A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL								
A5. Latitude/Longitude							927 X NAD 1983		
A6. Attach at least 2 p	_						_		
A7. Building Diagram I	Number	7							
A8. For a building with	a crawls	pace or enclosure(s):							
a) Square footage	of crawls	space or enclosure(s)			2269.00 sq ft				
b) Number of pern	nanent flo	od openings in the cra	awispace	e or enclosure	e(s) within 1.0 foot	above adjacent gra	de <u>12</u>		
c) Total net area o	of flood op	enings in A8.b	3	3220.00 sq in	i				
d) Engineered floo	od openin	gs? 🗵 Yes 🗌 N	lo						
A9. For a building with	an attach	ed garage:							
a) Square footage of attached garageN/A sq ft									
b) Number of pem	b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade N/A								
c) Total net area o	f flood op	enings in A9.b		N/A sq	in				
d) Engineered floo	d) Engineered flood openings?								
=	SE	CTION B - FLOOD I	NSURA	NCE RATE	MAP (FIRM) INF	ORMATION			
	B1. NFIP Community Name & Community Number SARASOTA COUNTY - 125144  B2. County Name SARASOTA  B3. State Florida								
B4. Map/Panel B5 Number	5. Suffix	B6. FIRM Index Date	Effe	RM Panel ective/ vised Date	B8. Flood Zone(s)	B9. Base Flood El (Zone AO, use	levation(s) Base Flood Depth)		
12115C-0144 F		11-04-2016	11-04-2		AE	11.0'	594		
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 DPA									

# **ELEVATION CERTIFICATE**

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IMPORTANT: In these spaces, copy the co	FOR INSURANCE COMPANY USE					
Building Street Address (including Apt., Unit, 1665 CHAPLINE LN	Policy Number:					
City SARASOTA	State Florida	ZIP Code 34231	Company NAIC Number			
SECTION C - BI	JILDING ELEVATION INFO	RMATION (SURVEY R	EQUIRED)			
C1. Building elevations are based on:  *A new Elevation Certificate will be req		Building Under Construe building is complete.	uction* X Finished Construction			
C2. Elevations – Zones A1–A30, AE, AH, A Complete Items C2.a–h below according Benchmark Utilized: A699 2007	ng to the building diagram spe	with BFE), AR, AR/A, AR/ cified in Item A7. In Puert Datum: NAVD 1988	/AE, AR/A1-A30, AR/AH, AR/AO. to Rico only, enter meters.			
Indicate elevation datum used for the e		n) below.				
☐ NGVD 1929 ☒ NAVD 1980  Datum used for building elevations muse		or the BFE.				
· -			Check the measurement used.			
a) Top of bottom floor (including baser	ment, crawispace, or enclosur	e floor)	6.6 🗵 feet 🗌 meters			
b) Top of the next higher floor						
c) Bottom of the lowest horizontal structure of the control of the	ctural member (V Zones only)		N/A			
d) Attached garage (top of slab)						
<ul> <li>e) Lowest elevation of machinery or ed (Describe type of equipment and loc</li> </ul>	quipment servicing the building tation in Comments)	9	13.3 X feet  meters			
f) Lowest adjacent (finished) grade ne	ext to building (LAG)		6.3 X feet meters			
g) Highest adjacent (finished) grade no	ext to building (HAG)		6.5 X feet  meters			
<ul> <li>h) Lowest adjacent grade at lowest ele structural support</li> </ul>	evation of deck or stairs, include	ding	N/A ⊠ feet ☐ meters			
SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION						
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.						
Were latitude and longitude in Section A pro	ovided by a licensed land surv	eyor? ⊠Yes □No	☐ Check here if attachments.			
Certifier's Name LELAND F DySARD	License Numb 3859	er	16 T			
Title	Laland E Di	gitally signed by				
P.L.S		land F. DySard,	Place			
Company Name FLA SURVEYS CORP.		S. #3859	Sea			
Address 3884 PROGRESS AVE, SUITE 104-A	DIC #3950 Da	ite: 2 <del>021.01.19</del> :51:40 -05'00'	Here			
City NAPLES	State Florida	ZIP Code 34104				
Signature	Date 10-07-2020	Telephone (239) 404-7129	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)  GPS COORDINATES WERE TAKEN FROM GOOGLE EARTH. THE EQUIPMENT USED IS GPS. THERE EXISTS A 0.2' (TWO TENTHS) PLUS OR MINUS PRECISION. THE REAL TIME NETWORKS USED ARE FDOT AND TOPCON. ITEM LISTED IN C2(e) IS THE TANKLESS WATER HEATER ON THE RIGHT SIDE OF THE BUILDING. DATE OF FIELD WORK IS 10-07-2020.  VENTS USED, WERE CRAWL 4 SPACE DOOR SYSTEMS MODEL #: 816BA-816 AT 305 SQ. IN. EACH (1220 SQ. IN.) AND 8 FREEDOM VENT MODEL #: FFV-1608-W AT 250 SQ. IN. EACH (2,000)						

# **ELEVATION CERTIFICATE**

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

IMP	ORTANT: In these spaces, copy the correspo	nding information	from Section A.	FOR INSURANCE COMPANY USE
166	lding Street Address (including Apt., Unit, Suite, a 5 CHAPLINE LN	j		Policy Number:
City		State	ZIP Code	Company NAIC Number
SAF	RASOTA	Florida	34231	
	SECTION E – BUILDING I FOR ZO	ELEVATION INFO	DRMATION (SURVEY NO NE A (WITHOUT BFE)	T REQUIRED)
con	Zones AO and A (without BFE), complete Items nplete Sections A, B,and C. For Items E1–E4, user meters.	E1-E5. If the Certi e natural grade, if a	ficate is intended to suppor available. Check the measu	t a LOMA or LOMR-F request, rement used. In Puerto Rico only,
E1.	Provide elevation information for the following a the highest adjacent grade (HAG) and the lower	nd check the approst st adjacent grade (	priate boxes to show whetl LAG).	ner the elevation is above or below
	Top of bottom floor (including basement, crawlspace, or enclosure) is		feet met	ters above or below the HAG.
	<ul> <li>Top of bottom floor (including basement, crawlspace, or enclosure) is</li> </ul>		feet met	ters above or below the LAG.
E2.	For Building Diagrams 6–9 with permanent floor	d openings provide	d in Section A Items 8 and/	or 9 (see pages 1-2 of Instructions),
	the next higher floor (elevation C2.b in the diagrams) of the building is		feet met	ters  above or below the HAG.
	Attached garage (top of slab) is		feet	ters above or below the HAG.
E4.	Top of platform of machinery and/or equipment servicing the building is		feet	ters above or below the HAG.
E5.	Zone AO only: If no flood depth number is available floodplain management ordinance? Yes	able, is the top of th	ne bottom floor elevated in a own. The local official mus	accordance with the community's at certify this information in Section G.
	SECTION F - PROPERTY O	WNER (OR OWNE	R'S REPRESENTATIVE)	CERTIFICATION
_		othro who complete	s Sections A. B. and E for J	Zone A (without a FEMA-issued or
con	property owner or owner's authorized represent nmunity-issued BFE) or Zone AO must sign here.	The statements in	Sections A, B, and E are c	orrect to the best of my knowledge.
Pro	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati	The statements in ve's Name	Sections A, B, and E are c	orrect to the best of my knowledge.
Pro	nmunity-issued BFE) or Zone AO must sign here.	The statements in ve's Name	Sections A, B, and E are c	State ZIP Code
Prop	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati	The statements in	Sections A, B, and E are c	orrect to the best of my knowledge.
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati	The statements in	Sections A, B, and E are c	State ZIP Code
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati iress nature	The statements in	Sections A, B, and E are c	State ZIP Code
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati iress nature	The statements in	Sections A, B, and E are c	State ZIP Code
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati iress nature	The statements in	Sections A, B, and E are c	State ZIP Code
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati iress nature	The statements in	Sections A, B, and E are c	State ZIP Code
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati iress nature	The statements in	Sections A, B, and E are c	State ZIP Code
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati iress nature	The statements in	Sections A, B, and E are c	State ZIP Code
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati iress nature	The statements in	Sections A, B, and E are c	State ZIP Code
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati iress nature	The statements in	Sections A, B, and E are c	State ZIP Code
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati iress nature	The statements in	Sections A, B, and E are c	State ZIP Code
Pro Add	nmunity-issued BFE) or Zone AO must sign here. perty Owner or Owner's Authorized Representati iress nature	The statements in	Sections A, B, and E are c	State ZIP Code

# **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corre	sponding information	from Section A.		FOR INSURAN	ICE COMPANY USE
Building Street Address (including Apt., Unit, St 1665 CHAPLINE LN	ite, and/or Bldg. No.) or	P.O. Route and Box N	lo.	Policy Number	
City SARASOTA	State Florida	ZIP Code 34231		Company NAIC	Number
SECTIO	ON G - COMMUNITY INI		NAL)		<del> </del>
The local official who is authorized by law or on Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, en	dinance to administer the Certificate. Complete the	e community's floodpla	in man	agement ordina below. Check th	nce can complete ne measurement
G1. The information in Section C was take engineer, or architect who is authorized data in the Comments area below.)	an from other documents ad by law to certify eleve	ation that has been signation information. (Indic	ned and ate the	d sealed by a lic source and dat	censed surveyor, te of the elevation
G2. A community official completed Section or Zone AO.	on E for a building locate	ed in Zone A (without a	FEMA	-issued or comr	nunity-issued BFE)
G3. The following information (Items G4-	G10) is provided for con	nmunity floodplain man	ageme	nt purposes.	
G4. Permit Number	G5. Date Permit Issue	d		ate Certificate o	
18-133733-B1				Jiipadi 100, 0 000	
G7. This permit has been issued for:	New Construction	Substantial Improveme	ent		
G8. Elevation of as-built lowest floor (including of the building:	basement)	<u> </u>	feet	☐ meters Da	itum
G9. BFE or (in Zone AO) depth of flooding at t	he building site:	□	feet	meters Da	itum
G10. Community's design flood elevation:			] feet	meters Da	tum
Local Official's Name		Title			
Community Name		Telephone			
Signature		Date			
Comments (including type of equipment and loc	ation, per C2(e), if applic	cable)			
2.21	•••	• =			200
					-
				☐ 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, o	FOR INSURANCE COMPANY USE		
Building Street Address (including 1665 CHAPLINE LN	Policy Number:		
City SARASOTA	State Florida	ZIP Code 34231	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

Photo One Caption FRONT VIEW PHOTO DATE: 10-07-2020.

Clear Photo One



Photo Two

Photo Two Caption LEFT SIDE VIEW PHOTO DATE: 10-07-2020.

Clear Photo Two

### **BUILDING PHOTOGRAPHS**

## **ELEVATION CERTIFICATE**

**Continuation Page** 

OMB No. 1660-0008

Expiration Date: November 30, 2022

IMPORTANT: in these spaces, o	FOR INSURANCE COMPANY USE		
Building Street Address (including 1665 CHAPLINE LN	Policy Number:		
City	State	ZIP Code	Company NAIC Number
SARASOTA	the second secon		

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.

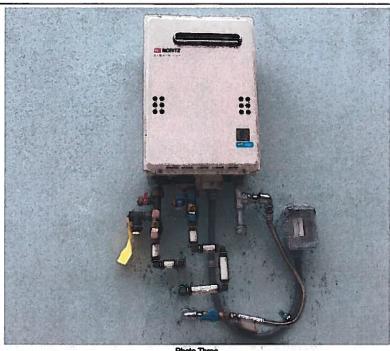


Photo Three

Photo Three Caption TANKLESS WATER HEATER PHOTO DATE: 10-07-2020.

Clear Photo Three



Photo Four

Photo Four Caption VENT VIEW PHOTO DATE: 10-07-2020.

Clear Photo Four



DIVISION: 08 00 00-OPENINGS SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

### REPORT HOLDER:

**CRAWL SPACE DOOR SYSTEMS, INC.** 

## **EVALUATION SUBJECT:**

**CRAWL SPACE DOOR SYSTEMS FLOOD VENT** 



"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"

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ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.





ESR-3851

Issued September 2018

This report is subject to renewal September 2019.

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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:

CRAWL SPACE DOOR SYSTEMS, INC.

**EVALUATION SUBJECT:** 

**CRAWL SPACE DOOR SYSTEMS FLOOD VENT** 

#### 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018 and 2015 International Building Code®
- 2018 and 2015 International Residential Code®

## Properties evaluated:

- Physical operation
- Water flow
- Weathering

#### 2.0 USES

Crawl Space Door Systems flood vent is used to provide for the equalization of hydrostatic flood forces on exterior walls.

#### 3.0 DESCRIPTION

#### 3.1 General:

Crawl Space Door Systems flood vent is an engineered mechanically operated flood vent. Upon contact with flood water, the flood vent automatically opens and allows flood water to enter and exit enclosed areas. The vents are constructed of general purpose ABS SP-9010 plastic. The vent has a faux louver with either a solid plastic plate or wire mesh attached to the back of the louver. The louver is dislodged from the vent upon contact with flood waters. See Figure 1 for illustrations of the flood vent.

#### 3.2 Engineered Opening:

The Crawl Space Door Systems static flood vent compiles with the design principle noted in Section 2.7.2.2 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 24-14, the flood vent must be installed in accordance with Section 4.0 of this report.

#### 4.0 DESIGN AND INSTALLATION

The Crawl Space Door Systems flood vent is designed to be installed into walls or doors of existing or new construction from the exterior side. 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, the vent must be installed as follows:

- With a minimum of two openings; one 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.

#### **6.0 CONDITIONS OF USE**

The Crawl Space Door Systems flood vent 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 Crawl Space Door Systems flood vent 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 govern.
- 5.2 Use of Crawl Space Door Systems 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 October 2017).

#### 7.0 IDENTIFICATION

- 7.1 The Crawl Space Door Systems flood vent recognized in this report must be identified by a label bearing the mariufacturer's name (Crawl Space Door Systems), the model number, and the evaluation report number (ESR-3851).
- 7.2 The report holder's contact information is the following:

CRÁWL SPACE DOOR SYSTEMS, INC. 3869 SEA GULL BLUFF DRIVE VIRGINIA BÉACH, VIRGINIA 23455 (757) 383-0005 www.crawlspacedoors.com

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsament of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report



TABLE 1-CRAWL SPACE DOOR SYSTEMS FLOOD VENT

MODEL	OVERALL VENT SIZE	ROUGH OPENING SIZE	ENCLOSED
	(Width x Height x Depth)	(Width x Holght)	AREA COVERAGE
	(in)	(In)	(ft <sup>2</sup> )
CSBA816	18 <sup>1</sup> / <sub>4</sub> × 10 <sup>1</sup> / <sub>2</sub> × 1 <sup>3</sup> / <sub>4</sub>	16 x 8 1/4	305

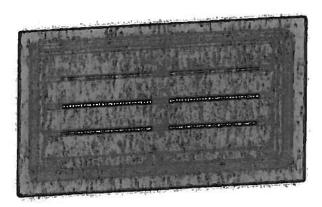


FIGURE 1—CRAWL SPACE DOOR SYSTEMS FLOOD VENT



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# **ICC-ES Evaluation Report**

# **ESR-3851 FBC Supplement**

Issued September 2018

This report is subject to renewal September 2019.

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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:

CRAWL SPACE DOOR SYSTEMS, INC.

**EVALUATION SUBJECT:** 

CRAWL SPACE DOOR SYSTEMS FLOOD VENT

## 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that Crawl Space Door Systems flood vent, recognized in ICC-ES master evaluation report ESR-3851, has 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 Crawl Space Door Systems flood vent, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3851, compiles with the Florida Building Code—Building and 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 Crawl Space Door Systems flood vent has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the 2017 Florida Building Code—Building and 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, issued September 2018.





**ESR-4332** 

Reissued March 2020

This report is subject to renewal March 2022.

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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 EVALUATION SCOPE

#### Compliance with the following codes:

- 2018, 2015, 2012, 2009 and 2006 International Building Code® (IBC)
- 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™ 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™ 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 (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 (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™ 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™ 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<sup>™</sup> 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 October 2017).

#### 7.0 IDENTIFICATION

7.1 The Freedom Flood Vent™ model recognized 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.freedomfloodyent.com

info@freedomfloodvent.com

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

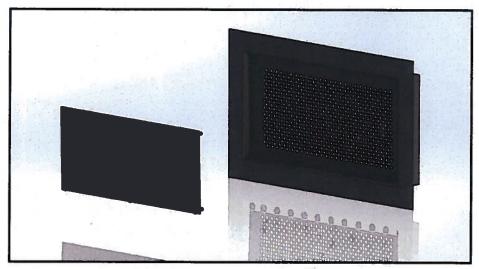


FIGURE 1—MODEL FFV-1608 FREEDOM FLOOD VENT™: SHOWN WITH COVER REMOVED

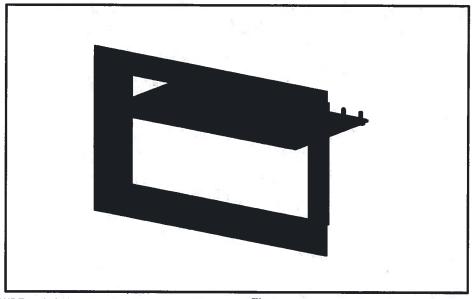


FIGURE 2-MODEL FFV-1608 FREEDOM FLOOD VENT™: SHOWN WITH FLOOD DOOR PIVOTED OPEN



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

Reissued March 2020

This report is subject to renewal March 2022.

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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, recognized in ICC-ES master evaluation report ESR-4332, has also been evaluated for compliance with codes noted below.

#### Applicable code edition(s):

- 2016 California Building Code (CBC)
- 2016 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 master evaluation report ESR-4332, complies with CBC Chapters 12, 16 and 16A, provided the design and installation are in accordance with the 2015 *International Building Code*® (2015 IBC) provisions noted in the master report and the additional requirements of 12, 16, and 16A, as applicable.

The product recognized in this supplement has not been evaluated under CBC Chapter 7A for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area.

#### 2.2 CRC:

The Freedom Flood Vent<sup>™</sup> Automatic Foundation Flood Vent: Model FFV-1608, described in Sections 2.0 through 7.0 of the master evaluation report ESR-4332, complies with the 2016 CRC, provided the design and installation are in accordance with the 2015 *International Residential Code*® (2015 IRC) provisions noted in the master report.

The product recognized in this supplement has not been evaluated under 2016 CRC Chapter R337, for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area.

The product recognized in this supplement has not been evaluated for compliance with the *International Wildland–Urban Interface Code*®.

This supplement expires concurrently with the evaluation report, reissued March 2020.





# **ESR-4332 FBC Supplement**

Reissued 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:

**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, recognized in ICC-ES master evaluation report ESR-4332, has 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 Freedom Flood Vent™ Automatic Foundation Flood Vent: Model FFV-1608, described in Sections 2.0 through 7.0 of the master evaluation report ESR-4332, complies with the *Florida Building Code—Building and the Florida Building Code—Residential*, provided the design and installation are in accordance with the *International Building Code*® (IBC) provisions noted in the master report.

Use of the Freedom Flood Vent<sup>™</sup> 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 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 evaluation report, reissued March 2020.

