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

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

	SE	CTION A - PROPERT	V INFO	DMATION	ilciai, (2) irisurance a		any, and (3) building owne
SECTION A – PROPERTY INFORMATION A1. Building Owner's Name				Policy Nu	JRANCE COMPANY USE		
Maria DiCino & Thomas Glasser				Folicy Nul	mber:		
<ul><li>A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.</li><li>310 North Wilson Avenue</li></ul>				Company	NAIC Number:		
City			-	State		ZIP Code	
Margate				New Jersey		08401	
BLOCK: 524.02	cription (Lot a	and Block Numbers, Ta	ax Parc	el Number, Legal D	escription, etc.)		
A4. Building Use (	A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential 2~Story Frame						
		39*19'39.71"			Horizontal Datum		1927 X NAD 1983
		ohs of the building if the					1927 X NAD 1983
A7. Building Diagra				accurate in a migration	to obtain nood misura	ilce.	
		space or enclosure(s):					
		space or enclosure(s)		837 sq ft			
		ood openings in the cra			within 4 O fact at		
c) Total net an	ea of flood o	penings in A8.b 1,5	500	sa in	vitilii 1.0 foot above	adjacent gi	rade6
d) Engineered				54 III			
			0				
A9. For a building v	vith an attach	ned garage:					
a) Square foot	a) Square footage of attached garage 0 sq ft						
b) Number of p	ermanent flo	ood openings in the att	ached (	garage within 1.0 fo	ot above adjacent gr	ade	0
			0	sq in	, ,		
d) Engineered		-	^				
, ,		ac.	0				
	SE	CTION B - FLOOD IN	ISURA	NCE RATE MAP	(FIRM) INFORMAT	ION	
B1. NFIP Communit	y Name & C	ommunity Number		B2. County Name			B3. State
Margate 345304				Atlantic			New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index		IRM Panel	B8. Flood Zone(s)	B9 Bas	I se Flood Elevation(s)
	-	Date	_	ffective/ evised Date	( )	(Zor	ne AO, use Base
34001-C0434	F	06/18/1971	08/28	/2018	AE	9.00	d Deptil)
R10 Indicate the se							
FIS Profile	FIRM F	Base Flood Elevation (E	BFE) da	ata or base flood de	pth entered in Item B	9:	
		Community Determi	inea [>	X] Other/Source: P	reliminary Map		
B11. Indicate elevat	ion datum us	ed for BFE in Item B9:	□ N	GVD 1929 🗵 NA	VD 1988	r/Source:	
B12. Is the building	located in a (	Coastal Barrier Passur	-000 Cv	rate == (ODDO)		_	
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes No Designation Date:							
		ЦС	BRS	☐ OPA			

## **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the corresponding information from Sect	FOR INSURANCE COMPANY USE	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route 310 North Wilson Avenue	Policy Number:	
City State ZIP C Margate New Jersey 0840		Company NAIC Number
SECTION C – BUILDING ELEVATION INFORMATI	ON (SURVEY R	EQUIRED)
C1. Building elevations are based on: Construction Drawings* Buildi *A new Elevation Certificate will be required when construction of the building C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE Complete Items C2.a–h below according to the building diagram specified in Benchmark Utilized: Private Benchmarks Vertical Datum: Nortical Datum: Nortical Datum: Nortical 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 BF a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	g is complete. E), AR, AR/A, AR/ Item A7. In Puert NAVD 1988	/AE AB/A1 A20 AB/A11 AB/A0
b) Top of the next higher floor  c) Bottom of the lowest horizontal structural member (V Zones only)  d) Attached garage (top of slab)  e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)  f) Lowest adjacent (finished) grade next to building (LAG)  g) Highest adjacent (finished) grade next to building (HAG)  h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	12. 5 N/A. N/A. 14. 5 3. 70 4. 30 4. 30	
SECTION D – SURVEYOR, ENGINEER, OR ARCH  This certification is to be signed and sealed by a land surveyor, engineer, or architely that the information on this Cortificate represents are by the first of the second	ect authorized by	low to positive almost a to the
statement may be punishable by fine or imprisonment under 18 U.S. Code, Section  Were latitude and longitude in Section A provided by a licensed land surveyor?  Certifier's Name  License Number	et the data availal n 1001.	Check here if attachments.
A41==41= C14.	ZIP Code 18401	Place Seal Here
Signature  Date T 12/16/2019  (6)  Copy all pages of this Elevation Certificate and all attachments for (1) community official	elephone 609) 345-1887	gent/company, and (3) building owner.
Comments (including type of equipment and location, per C2(e), if applicable) All elevations refer to N.G.V.D. (1929 Datum) maintained benchmarks by Catalano A9, if any are gross opening area. These values may be increased in accordance values on Field Notes by Catalano Surveys. Lowest part of machinery is the H.V.A. Engineered Flood Vents are Freedom Flood Vents Model# FFV1608 @250Sq. each	Surveys. Flood o	nenings shown in sections A2 and

### **ELEVATION CERTIFICATE**

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

IMPORTANT: In these spaces, copy the correspond	FOR INSURANCE COMPANY USE				
Building Street Address (including Apt., Unit, Suite, and 310 North Wilson Avenue	Policy Number:				
l	State New Jersey	ZIP Code 08401	Company NAIC Number		
SECTION E – BUILDING EL FOR ZONI	EVATION INFO	RMATION (SURVEY N E A (WITHOUT BFE)	OT REQUIRED)		
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 the highest adjacent grade (HAG) and the lowest a a) Top of bottom floor (including basement,	check the appropadjacent grade (L	oriate boxes to show whe AG).	ther the elevation is above or below		
crawlspace, or enclosure) is b) Top of bottom floor (including basement,		feet me	eters above or below the HAG.		
crawlspace, or enclosure) is  E2. For Building Diagrams 6–9 with permanent flood of	nenings provided	in Section A Items 8 and			
the next higher floor (elevation C2.b in the diagrams) of the building is		feet me	_		
E3. Attached garage (top of slab) is		feet me	eters above or below the HAG.		
E4. Top of platform of machinery and/or equipment servicing the building is		feet me			
E5. Zone AO only: If no flood depth number is available floodplain management ordinance? Yes	e, is the top of the No  Unknov	bottom floor elevated in vn. The local official mu	accordance with the community's st certify this information in Section G.		
SECTION F - PROPERTY OWN	IER (OR OWNER	R'S REPRESENTATIVE)	CERTIFICATION		
The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.					
Property Owner or Owner's Authorized Representative's					
Address 310 u Wilson Pue	RA		State ZIP Code		
Signature		ate	Telephone 08209		
Comments Comments		9/20	604-822-013		
			Check here if attachments.		

## **ELEVATION CERTIFICATE**

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

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. 310 North Wilson Avenue			Policy Number:		
City	State	ZIP Code	Company NAIC Number		
Margate	New Jersey	08401			
SECTION	ON G - COMMUNITY INFO	ORMATION (OPTIONAL)			
The local official who is authorized by law or or Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, en	Certificate Complete the	community's floodplain mar applicable item(s) and sign	nagement ordinance can complete below. Check the measurement		
G1. X 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.)					
G2. A community official completed Section or Zone AO.	on E for a building located	in Zone A (without a FEMA	A-issued or community-issued BFE)		
G3. The following information (Items G4–	G10) is provided for comm	nunity floodplain manageme	ent purposes.		
G4. Permit Number	G5. Date Permit Issued		ate Certificate of ompliance/Occupancy Issued		
G7. This permit has been issued for:	New Construction  Su	bstantial Improvement			
G8. Elevation of as-built lowest floor (including of the building:	basement)	feet	meters Datum		
G9. BFE or (in Zone AO) depth of flooding at the	ne building site:	feet	meters Datum		
G10. Community's design flood elevation:		feet	meters Datum		
Local Official's Name	I left Tit		M		
Community Name  MA/C6A	Te	elephone 609	123 /2021		
Signature	Da		23/2020		
Comments (including type of equipment and local	ation, per C2(e), if applicab	ole)	7 / 01 00		
			Check here if attachments.		

#### **BUILDING PHOTOGRAPHS**

#### **ELEVATION CERTIFICATE**

See Instructions for Item A6.

OMB No. 1660-0008

Expiration Date: November 30, 2018

IMPORTANT: In these spaces, c	FOR INSURANCE COMPANY USE		
Building Street Address (including 310 North Wilson Avenue	o. Policy Number:		
City Margate	State New Jersey	ZIP Code 08401	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 12/16/2019



Photo Two

Photo Two Caption Side View 12/16/2019

#### **BUILDING PHOTOGRAPHS**

#### **ELEVATION CERTIFICATE**

Continuation Page

OMB No. 1660-0008

Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the	FOR INSURANCE COMPANY USE		
Building Street Address (including Apt., U 310 North Wilson Avenue	Policy Number:		
City Margate	State New Jersey	ZIP Code 08401	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 One

Photo One Caption Rear View 12/16/2019



Photo Two

Photo Two Caption Freedom Flood Vet FFV1608



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## **ICC-ES Evaluation Report**

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

ESR-4332

This report is subject to renewal 03/2020.

**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**



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

A Subsidiary of CODE

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically





## **ICC-ES Evaluation Report**

**ESR-4332** 

Issued March 2019

This report is subject to renewal March 2020.

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

A Subsidiary of the International Code Council®

DIVISION: 08 00 00—OPENINGS

Section: 08 95 43—Vents / Foundation Flood Vents

REPORT HOLDER:

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  $Vent^{\mathsf{TM}}$  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™ 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<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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 m<sup>2</sup>) 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<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<sup>™</sup> 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.freedomfloodvent.com
info@freedomfloodvent.com

#### TABLE 1—FREEDOM FLOOD VENT™

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

For SI: 1 inch = 25.4 mm

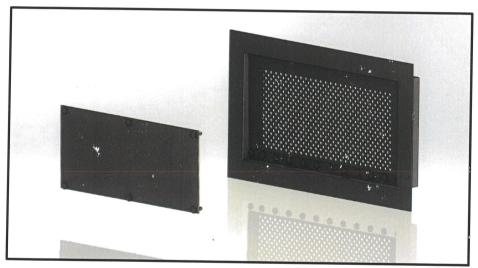


FIGURE 1—MODEL FFV-1608 FREEDOM FLOOD VENT™: SHOWN WITH COVER REMOVED

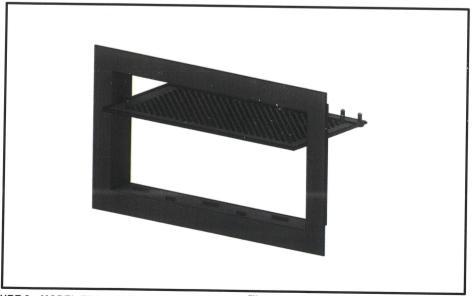


FIGURE 2—MODEL FFV-1608 FREEDOM FLOOD VENT™: SHOWN WITH FLOOD DOOR PIVOTED OPEN



## **ICC-ES Evaluation Report**

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

Issued March 2019

This report is subject to renewal 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<sup>TM</sup> 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 dutomatic 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™ 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 master report, issued March 2019.



## **ICC-ES Evaluation Report**

## **ESR-4332 FBC Supplement**

Issued March 2019

This report is subject to renewal 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 Ventr 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™ 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 master report, issued March 2019.

