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.

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the correspondin	g information from Se	ection A.	FOR INS	URANC	E COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/o 129 N. NEWPORT AVENUE	or Bldg. No.) or P.O. Ro	oute and Box No.	Policy Nu		£
City Sta VENTNOR Ne		Code 406	Company	NAIC N	lumber
SECTION C – BUILDING EL	EVATION INFORMA	TION (SURVEY RE	EQUIRED)		
C1. Building elevations are based on: Constructi *A new Elevation Certificate will be required when construction of the complete Items C2.a—h below according to the build Benchmark Utilized: LOCAL BENCH Indicate elevation datum used for the elevations in improved in the construction of	on Drawings*	ilding Under Constru ling is complete. BFE), AR, AR/A, AR/A in Item A7. In Puerto : NGVD 1929 ow.	ction* [≥ AE, AR/A1 o Rico only Check	≺ Finish -A30, A r, enter r	neters. asurement used.
	bace, or enclosure 1100	7)		2	☐ meters
b) Top of the next higher floor			14.2 ×	. 1027	☐ meters
c) Bottom of the lowest horizontal structural member	er (V Zones only)		N/A [feet	meters
d) Attached garage (top of slab)		2	N/A	feet	meters
 e) Lowest elevation of machinery or equipment ser (Describe type of equipment and location in Com 	nments)		14.2		meters
f) Lowest adjacent (finished) grade next to building			6.4 ×	feet	meters
g) Highest adjacent (finished) grade next to building	7 / 17	3	6.5 ×	feet	meters
h) Lowest adjacent grade at lowest elevation of dec structural support	ck or stairs, including		6.2	feet	meters
SECTION D – SURVEYOR,	ENGINEER, OR AR	CHITECT CERTIFIC	CATION	19-	260
This certification is to be signed and sealed by a land sur I certify that the information on this Certificate represents statement may be punishable by fine or imprisonment un Were latitude and longitude in Section A provided by a lice	my best efforts to inter der 18 U.S. Code, Sed	rpret the data availab tion 1001.	le. I under	stand th	tion information. at any false if attachments.
Certifier's Name			T One	OK HOTE	ii attacriments.
HOWARD A. TRANSUE	License Number GS33451				
Title PROFESSIONAL LAND SURVEYOR			053754/ Place		
Company Name SCHAEFFER NASSAR SCHEIDEGG, CE, LLC					eal
Address 1425 CANTILLON BOULEVARD		3		HE	ere_
City MAYS LANDING	State New Jersey	ZIP Code 08330] '	3/24	12021
Signature III.	Date 03-24-2021	Telephone (609) 625-7400	Ext.		
Copy all pages of this Elevation Certificate and all attachmen	nts for (1) community of	ficial, (2) insurance ag	gent/compa	ny, and	(3) building owner.
Comments (including type of equipment and location, per ITEM A8b VENTS ARE SMART VENTS MODEL 1540-51 ITEM C2e ALL MECHANICALS ARE AT FINISH FLOOR PICTURES TAKEN 3/22/2120. SUBJECT STRUCTURE IS HALF OF A DUPLEX.	0 RATED AT 200 SQ.			-	
a a		, 2			

ELEVATION CERTIFICATE

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

			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/o	*		Policy Number:
10 mm - 10 mm		Code 406	Company NAIC Number
SECTION E – BUILDING ELE FOR ZONE	VATION INFORMATI AO AND ZONE A (W		REQUIRED)
For Zones AO and A (without BFE), complete Items E1–complete Sections A, B,and C. For Items E1–E4, use narenter meters. E1. Provide elevation information for the following and c the highest adjacent grade (HAG) and the lowest ad a) Top of bottom floor (including basement, crawlspace, or enclosure) is	tural grade, if available. heck the appropriate bo	Check the measure	r the elevation is above or below
 Top of bottom floor (including basement, crawlspace, or enclosure) is 		feet meter	s above or below the LAG.
 E2. For Building Diagrams 6–9 with permanent flood oper the next higher floor (elevation C2.b in the diagrams) of the building is E3. Attached garage (top of slab) is E4. Top of platform of machinery and/or equipment 	enings provided in Sect	ion A Items 8 and/or feet meter feet meter	s above or below the HAG.
servicing the building is		feet meter	
E5. Zone AO only: If no flood depth number is available, floodplain management ordinance? Yes I			cordance with the community's certify this information in Section G.
SECTION F - PROPERTY OWNE	R (OR OWNER'S REF	PRESENTATIVE) CE	RTIFICATION 19-260
The property owner or owner's authorized representative community-issued BFE) or Zone AO must sign here. The	who completes Section statements in Sections	ns A, B, and E for Zo s A, B, and E are cor	ne A (without a FEMA-issued or rect to the best of my knowledge.
Property Owner or Owner's Authorized Representative's		2	
Address	City	Sta	ate ZIP Code
Signature	Date	Te	lephone
Comments			
			*
	9		
			±
× 4			
9.5			7
er.			

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corr	esponding information from	n Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, S 129 N. NEWPORT AVENUE	uite, and/or Bldg. No.) or P.C). Route and Box No.	Policy Number:
City VENTNOR	State New Jersey	ZIP Code 08406	Company NAIC Number
SECTION	ON G - COMMUNITY INFOR	RMATION (OPTIONAL)	19-260
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 ap		
G1. The information in Section C was tak engineer, or architect who is authoriz 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 FEM)	A-issued or community-issued BFE)
G3. The following information (Items G4-	G10) is provided for commu	nity floodplain managem	ent purposes.
G4. Permit Number	G5. Date Permit Issued		Date Certificate of Compliance/Occupancy Issued
G7. This permit has been issued for:	New Construction Subs	stantial Improvement	
G8. Elevation of as-built lowest floor (including of the building:	j basement)	feet	meters Datum
G9. BFE or (in Zone AO) depth of flooding at t	he building site:	feet	meters Datum
G10. Community's design flood elevation:	(feet	meters Datum
Local Official's Name Dino CAUALICIA	Title	C.FM.	9
Community Name	Tele	ephone	
Ventron	8		23-7987
Dino CAUATION Community Name Ven hor Signature Community Name	Date	7-7-21	
Comments (including type of equipment and loc	ation, per C2(e), if applicable		
	a v		× .
			ac
			a .
8			×
×-	v		
	a a		
			x - 8
			e e
×	a a		Check here if attachments.

BUILDING PHOTOGRAPHS

See Instructions for Item A6.

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

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. Policy Number: 129 N. NEWPORT AVENUE

ZIP Code Company NAIC Number State 08406 VENTNOR New Jersey

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

ELEVATION CERTIFICATE

19,760

Clear Photo One



Photo Two

BUILDING PHOTOGRAPHS

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.

129 N. NEWPORT AVENUE

City State ZIP Code Company NAIC Number

VENTNOR New Jersey 08406

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 SMART VENT MODEL 1540-510 TYPICAL OF 4

19-760

Clear Photo Three

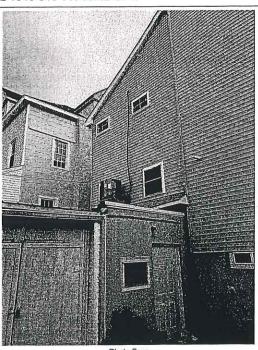


Photo Four

Photo Four Caption REAR VIEW

ELEVATION CERTIFICATE

Clear Photo Four



ICC-ES Evaluation Report

ESR-2074

Reissued February 2021

This report is subject to renewal February 2023.

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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 VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514 FLOOD VENT SEALING KIT #1540-526

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)
- 2018 International Energy Conservation Code® (IECC)
- 2013 Abu Dhabi International Building Code (ADIBC)†

'The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Physical operation
- Water flow

2.0 USES

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

3.0 DESCRIPTION

3.1 General:

When subjected to rising water, the Smart Vent® FVs internal floats are activated, then pivot open to allow flow in either direction to equalize water level and hydrostatic pressure from one side of the foundation to the other. The FV pivoting door is normally held in the closed position by a buoyant release device. When subjected to rising water, the buoyant release device causes the unit to unlatch, allowing the door to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces.

Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. The SmartVENT® Stacking Model #1540-511 and FloodVENT® Stacking Model #1540-521 units each contain two vertically arranged openings per unit.

3.2 Engineered Opening:

The FVs comply with the design principle noted in Section 2.7.2.2 and Section 2.7.3 of ASCE/SEI 24-14 [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, Smart Vent FVs must be installed in accordance with Section 4.0.

3.3 Ventilation:

The SmartVENT® Model #1540-510 and SmartVENT® Overhead Door Model #1540-514 both have screen covers with ¹/₄-inch-by-¹/₄-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm²) of net free area to supply natural ventilation. The SmartVENT® Stacking Model #1540-511 consists of two Model #1540-510 units in one assembly, and provides 102 square inches (65 806 mm²) of net free area to supply natural ventilation. Other FVs recognized in this report do not offer natural ventilation.

3.4 Flood Vent Sealing Kit:

The Flood Vent Sealing Kit Model #1540-526 is used with SmartVENT® Model #1540-520. It is a Homasote 440 Sound Barrier® (ESR-1374) insert with 21 – 2-inch-by-2-inch (51 mm x 51 mm) squares cut in it. See Figure 4.

4.0 DESIGN AND INSTALLATION

4.1 SmartVENT® and FloodVENT®:

SmartVENT® and FloodVENT® are designed to be installed into walls or overhead doors of existing or new construction from the exterior side. Installation of the vents must be in accordance with the manufacturer's instructions, the applicable code and this report. Installation clips allow mounting in masonry and concrete walls of any thickness. In order to comply with the engineered opening design principle noted in Section 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)], the Smart Vent® 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 200 square



feet (18.6 m²) of enclosed area, except that the SmartVENT® Stacking Model #1540-511 and FloodVENT® Stacking Model #1540-521 must be installed with a minimum of one FV for every 400 square feet (37.2 m²) of enclosed area.

- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final grade or floor and finished exterior grade immediately under each opening.

4.2 Flood Vent Sealing Kit

The Flood Vent Sealing Kit Model 1540-526 is used in conjunction with FloodVENT® Model #1540-520. When installed and tested in accordance with ASTM E283, the FV and Flood Vent Sealing Kit assembly have an air leakage rate of less than 0.2 cubic feet per minute per lineal foot (18.56 l/min per lineal meter) at a pressure differential of 1 pound per square foot (50 Pa) based on 12.58 lineal feet (3.8 lineal meters) contained by the Flood Vent Sealing Kit.

5.0 CONDITIONS OF USE

The Smart Vent[®] FVs 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 Smart Vent® 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 Smart Vent[®] FVs must not be used in the 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

- 6.1 Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015 (editorially revised October 2017).
- 6.2 Test report on air infiltration in accordance with ASTM E283.

7.0 IDENTIFICATION

- 7.1 The Smart VENT[®] models and the Flood Vent Sealing Kit recognized in this report must be identified by a label bearing the manufacturer's name (Smartvent Products, Inc.), the model number, and the evaluation report number (ESR-2074).
- **7.2** The report holder's contact information is the following:

SMART VENT PRODUCTS, INC. 430 ANDBRO DRIVE, UNIT 1 PITMAN, NEW JERSEY 08071 (877) 441-8368 www.smartvent.com info@smartvent.com

TABLE 1-MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	$15^3/_4$ " $\times 7^3/_4$ "	200
SmartVENT®	1540-510	15 ³ / ₄ " X 7 ³ / ₄ "	200
FloodVENT® Overhead Door	1540-524	15 ³ / ₄ " X 7 ³ / ₄ "	200
SmartVENT® Overhead Door	1540-514	15 ³ / ₄ " X 7 ³ / ₄ "	200
Wood Wall FloodVENT®	1540-570	14" X 8 ³ / ₄ "	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 ³ / ₄ "	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent® Stacker	1540-521	16" X 16"	400

For SI: 1 inch = 25.4 mm; 1 square foot = m²

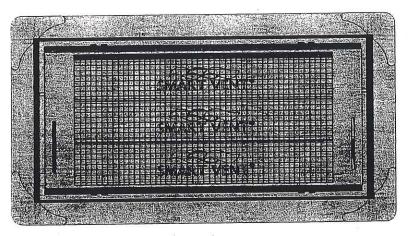


FIGURE 1-SMART VENT: MODEL 1540-510

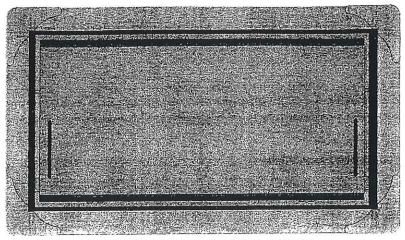


FIGURE 2—SMART VENT MODEL 1540-520

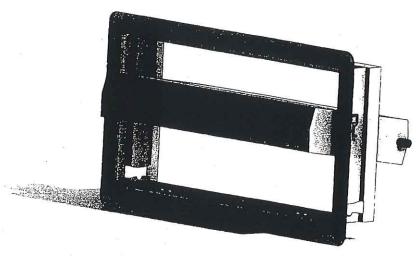


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN

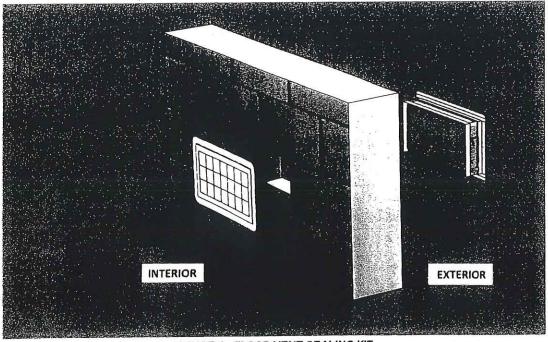


FIGURE 4—FLOOD VENT SEALING KIT



ICC-ES Evaluation Report

ESR-2074 CBC and CRC Supplement

Reissued February 2021

This report is subject to renewal February 2023.

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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 VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514 FLOOD VENT SEALING KIT #1540-526

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, described in ICC-ES evaluation report ESR-2074, have also been evaluated for compliance with codes noted below.

Applicable code edition:

- 2016 California Building Code (CBC)
- 2016 California Residential Code (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with 2016 CBC Chapter 12, provided the design and installation are in accordance with the 2015 International Building Code® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 12, 16 and 16A, as applicable.

2.2 CRC:

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with the 2016 CRC, provided the design and installation are in accordance with the 2015 International Residential Code® (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued February 2021.





ICC-ES Evaluation Report

ESR-2074 FBC Supplement

Reissued February 2021

This report is subject to renewal February 2023.

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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 VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514
FLOOD VENT SEALING KIT #1540-526

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, described in ICC-ES evaluation report ESR-2074, 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 Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with the *Florida Building Code—Building* and the FRC, provided the design and installation are in accordance with the 2015 *International Building Code®* provisions noted in the evaluation report.

Use of the Smart Vent® Automatic Foundation 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 evaluation report, reissued February 2021.

