

DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
ELEVATION CERTIFICATE

IMPORTANT: FOLLOW THE INSTRUCTIONS ON PAGES 9-16

OMB Control Number: 1660-0008
Expiration: 11/30/2018

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						FORM INSURANCE COMPANY USE			
A1. Building Owner's Name Van S. Carlucci						Policy Number:			
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 221 North Lancaster Avenue						Company NAIC Number:			
City Margate				State NJ		Zip Code 08402			
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Block 413.02 Lot 1									
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential									
A5. Latitude/Longitude: Lat. 39°19'51.0" Long. 74°30'28.9" Horizontal Datum: <input type="radio"/> NAD 1927 <input checked="" type="radio"/> NAD 1983									
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.									
A7. Building Diagram Number 8									
A8. For a building with a crawlspace or enclosure(s):					A9. For a building with an attached garage:				
a) Square footage of crawlspace or enclosure(s) 1,103 sq ft					a) Square footage of attached garage n/a sq ft				
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 7					b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade n/a				
c) Total net area of flood openings in A8.b 1,400 sq in					c) Total net area of flood openings in A9.b n/a sq in				
d) Engineered flood openings? <input checked="" type="radio"/> Yes <input type="radio"/> No					d) Engineered flood openings? <input type="radio"/> Yes <input checked="" type="radio"/> No				
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION									
B1. NFIP Community Name & Community Number City of Margate - 345304					B2. County Name Atlantic County			B3. State NJ	
B4. Map/Panel Number 345304 0001		B5. Suffix C	B6. FIRM Index Date Jun 18, 1971		B7. FIRM Panel Effective/Revised Date Oct 18, 1983		B8. Flood Zone(s) A8		B9. Base Flood Elevation(s) (Zone AO, use base flood depth 10')
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="radio"/> FIS Profile <input checked="" type="radio"/> FIRM <input type="radio"/> Community Determined <input type="radio"/> Other/Source: _____									
B11. Indicate elevation datum used for BFE in Item B9: <input checked="" type="radio"/> NGVD 1929 <input type="radio"/> NAVD 1988 <input type="radio"/> Other/Source: _____									
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="radio"/> Yes <input checked="" type="radio"/> No Designation Date: <input type="radio"/> CBRS <input type="radio"/> OPA									
SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)									
C1. Building elevations are based on: <input type="radio"/> Construction Drawings* <input type="radio"/> Building Under Construction* <input checked="" type="radio"/> 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. * A new Elevation Certificate will be required when construction of the building is complete.									
Benchmark Utilized: 5.25' (Corpscon 6.0.1) Vertical Datum: NGVD29									
Indicate elevation datum used for the elevations in items a) through h) below. <input checked="" type="radio"/> NGVD 1929 <input type="radio"/> NAVD 1988 <input type="radio"/> Other/Source: _____									
Datum used for building elevations must be the same as that used for the BFE. Check the measurement used.									
a) Top of bottom floor (including basement, crawlspace, or enclosure floor) 6 - 1 <input checked="" type="radio"/> feet <input type="radio"/> meters									
b) Top of the next higher floor 12 - 7 <input checked="" type="radio"/> feet <input type="radio"/> meters									
c) Bottom of the lowest horizontal structural member (V Zones only) n/a - <input type="radio"/> feet <input type="radio"/> meters									
d) Attached garage (top of slab) n/a - <input type="radio"/> feet <input type="radio"/> meters									
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) 13 - 0 <input checked="" type="radio"/> feet <input type="radio"/> meters									
f) Lowest adjacent (finished) grade next to building (LAG) 5 - 8 <input checked="" type="radio"/> feet <input type="radio"/> meters									
g) Highest adjacent (finished) grade next to building (HAG) 6 - 3 <input checked="" type="radio"/> feet <input type="radio"/> meters									
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support 5 - 7 <input checked="" type="radio"/> feet <input type="radio"/> meters									

ELEVATION CERTIFICATE

OMB Control Number: 1660-0008
Expiration: 11/30/2018

221 North Lancaster Avenue

Margate

NJ

08402

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.

☒ Check here if attachments.

Were latitude and longitude in Section A provided by a licensed land surveyor?

☒ Yes ☐ No

Certifier's Name
Marc J. Cifone, PLS

License Number
24GS04132900

Title
President

Company Name
Lakeland Surveying, Inc.

Address
117 Hibernia Avenue

City
Rockaway

State
NJ

Zip Code
07866

Signature

Date
Jul 26, 2016

Telephone
+1 (973) 625-5670

PLACE
SEAL
HERE

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including type of equipment and location, per C2(e), if applicable)"

Atlantic County, NJ - Preliminary FIRM Map No. 34001C0434F revised January 30, 2015 - Zone AE / BFE 8' (NAVD88) = - 9.23' (NGVD29)
C2(e) Furnace and Hot Water Heater
Smart Vent Model No. 1540-510

Signature

Date Jul 26, 2016

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 ☐ meters ☐ above or ☐ below the HAG.

b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ - _____ ☐ feet ☐ meters ☐ above or ☐ below the LAG.

E2. For Building Diagrams 6 -9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8 -9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____ - _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E3. Attached garage (top of slab) is _____ - _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is _____ - _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? ☐ Yes ☐ No ☐ Unknown. The local official must certify this information in Section G.

SECTION F - PROPERTY OWNER (OR OWNER'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 Name:

Address

City

State

ZIP Code

Signature

Date

Telephone

Comments

☐ Check here if attachments.

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

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. 221 N LANCASTER AVENUE			Policy Number:
City MARGATE	State New Jersey	ZIP Code 08402	Company NAIC Number


SECTION G – COMMUNITY INFORMATION (OPTIONAL)

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.

- G1. ☐ 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 E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3. ☐ The following information (Items G4–G10) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate of Compliance/Occupancy Issued
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- G7. This permit has been issued for: ☐ New Construction ☐ Substantial Improvement
- G8. Elevation of as-built lowest floor (including basement) of the building: _____ ☐ 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 JIM GALANTINO	Title CFM
Community Name CITY OF MARGATE	Telephone 609-822-1974
Signature 	Date 8/15/2016

Comments (including type of equipment and location, per C2(e), if applicable)

☐ Check here if attachments.



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ICC-ES Evaluation Report

ESR-2074

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Reissued 02/2017

This report is subject to renewal 02/2019.

DIVISION: 08 00 00—OPENINGS

SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

REPORT HOLDER:

SMARTVENT PRODUCTS, INC.

**430 ANDBRO DRIVE, UNIT 1
PITMAN, NEW JERSEY 08071**

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**



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ICC-ES Evaluation Report

ESR-2074

Reissued February 2017

Revised November 2017

This report is subject to renewal February 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:
SMARTVENT PRODUCTS, INC.
430 ANDBRO DRIVE, UNIT 1
PITMAN, NEW JERSEY 08071
(877) 441-8368
www.smartvent.com
info@smartvent.com
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
1.0 EVALUATION SCOPE
Compliance with the following codes:

- 2015, 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2015, 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 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.

4.0 DESIGN AND INSTALLATION

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.

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

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

7.0 IDENTIFICATION

The Smart VENT® models 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).

TABLE 1—MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	15 ³ / ₄ " X 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

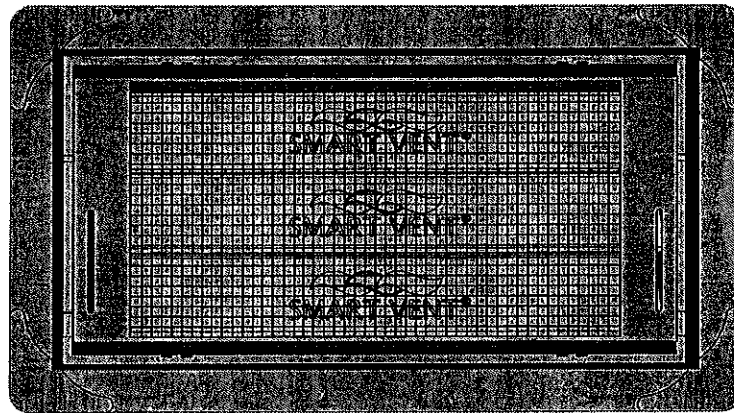


FIGURE 1—SMART VENT: MODEL 1540-510

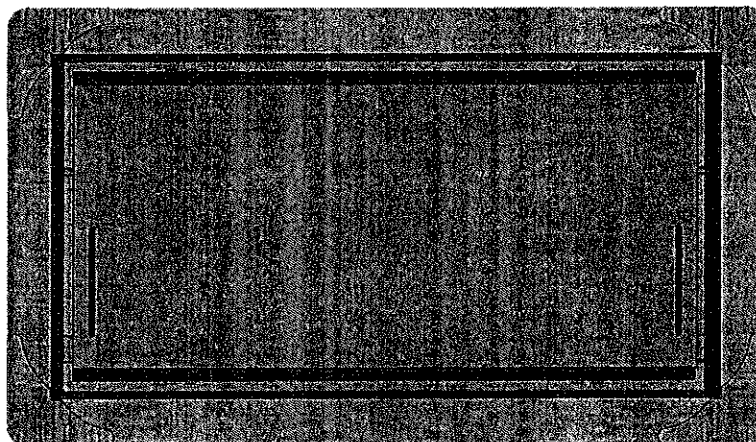


FIGURE 2—SMART VENT MODEL 1540-520

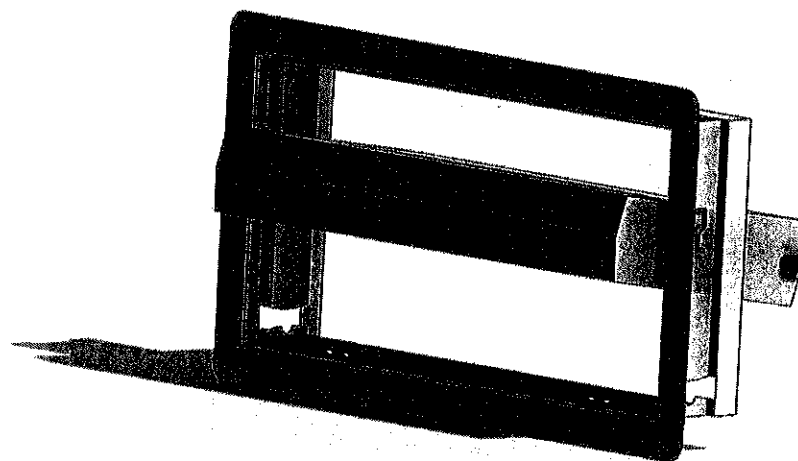


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN

ICC-ES Evaluation Report

ESR-2074 CBC and CRC Supplement

Issued February 2017

Revised November 2017

This report is subject to renewal February 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:

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

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

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, recognized in ICC-ES master 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 master 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 master report and the additional requirements of CBC Chapters 12, 16 and 16A, as applicable.

The products recognized in this supplement have 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 Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master 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 master report.

The products recognized in this supplement have 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 products recognized in this supplement have not been evaluated for compliance with the International Wildland-Urban Interface Code®.

This supplement expires concurrently with the master report, reissued February 2017 and revised November 2017.

ICC-ES Evaluation Report

ESR-2074 FBC Supplement

Reissued February 2017

Revised November 2017

This report is subject to renewal February 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:

SMARTVENT PRODUCTS, INC.

430 ANDBRO DRIVE, UNIT 1

PITMAN, NEW JERSEY 08071

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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

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, recognized in ICC-ES master 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 master 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 master 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 master report, reissued February 2017 and revised November 2017.

BUILDING PHOTOGRAPHS

See instructions for Item A6

OMB Control Number: 1660-0008

Expiration: 11/30/2018

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. 221 North Lancaster Avenue			Policy Number:	
City Margate	State NJ	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.



Front Left



Rear Right



Front Right



Front View



Rear Left



Vent

Pictures taken on July 23, 2016