

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008
 Expiration Date: July 31, 2015

SECTION A - PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

A1. Building Owner's Name Joe Edel

Policy Number:

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
 10 Seawood Avenue

Company NAIC Number:

City Borough of Keansburg State NJ ZIP Code 07734

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
 tax lot 11 block 108

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) residential

A5. Latitude/Longitude: Lat. 40 26 51.68 Long. 74 07 42.13

Horizontal Datum: NAD 1927 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 6

A8. For a building with a crawlspace or enclosure(s):

- a) Square footage of crawlspace or enclosure(s) 728.9 sq ft
- b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 4
- c) Total net area of flood openings in A8.b 800 sq in
- d) Engineered flood openings? Yes No

A9. For a building with an attached garage:

- a) Square footage of attached garage na sq ft
- b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade na
- c) Total net area of flood openings in A9.b na sq in
- d) Engineered flood openings? Yes No

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number
 Borough of Keansburg 340303

B2. County Name
 Monmouth

B3. State
 NJ

B4. Map/Panel Number
 34025c0034

B5. Suffix
 F

B6. FIRM Index Date
 September 25, 2009

B7. FIRM Panel Effective/Revised Date
 September 25, 2009

B8. Flood Zone(s)
 AE

B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
 11

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 NAVD 1988 Other/Source: _____

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes No
 Designation Date: _____ CBRS OPA

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: Construction Drawings* Building Under Construction* Finished Construction

*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations - Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: OPUS Vertical Datum: NAVD 88

Indicate elevation 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 BFE.

Check the measurement used.

- a) Top of bottom floor (including basement, crawlspace, or enclosure floor) 6.51 feet meters
- b) Top of the next higher floor 16.08 feet meters
- c) Bottom of the lowest horizontal structural member (V Zones only) na feet meters
- d) Attached garage (top of slab) na feet meters
- e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) 24.63 feet meters
- f) Lowest adjacent (finished) grade next to building (LAG) 5.62 feet meters
- g) Highest adjacent (finished) grade next to building (HAG) 5.91 feet meters
- h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support 5.58 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.

- Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor? Yes No
 Check here if attachments.

Certifier's Name Daren C Leeper License Number 24GS04334000

Title Surveyor Company Name Leeper Land Group, LLC

Address 767 Brunswick Pike City Lambertville State NJ ZIP Code 08530

Signature *Daren C Leeper* Date 6/2/14 Telephone 609-571-3955

ELEVATION CERTIFICATE, page 2

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. 10 Seawood Avenue		Policy Number:	
City Borough of Keansburg	State NJ	ZIP Code 07734	Company NAIC Number:

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

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

Comments lat and long taken from google earth. furnace located in attic. As of 6-2-14, the preliminary BFE is 11 zone AE.


Signature

Date 03/05/2016

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's or Owner's Authorized Representative's Name			
Address	City	State	ZIP Code
Signature	Date	Telephone	
Comments			
<input type="checkbox"/> Check here if attachments.			

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	Title
Community Name	Telephone
Signature	Date
Comments	
<input type="checkbox"/> Check here if attachments.	

Building Photographs

See Instructions for Item A6.

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. 10 Seawood Avenue		Policy Number:
City Borough of Keansburg	State NJ	ZIP Code 07734
		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 view 03-05-16



Rear view 03-05-16

OPUS-RS solution : 016632_14_154_A0.140 OP1401792059492

From: opus <opus@ngs.noaa.gov>
To: daren@leepergroup.com
Priority: Normal
Date: 06-03-2014 05:49 AM

FILE: 016632_14_154_A0.140 OP1401792059492

2005 NOTE: The IGS precise and IGS rapid orbits were not available
2005 at processing time. The IGS ultra-rapid orbit was/will be used to
2005 process the data.
2005

NGS OPUS-RS SOLUTION REPORT

All computed coordinate accuracies are listed as 1-sigma RMS values.
For additional information: <http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

USER: daren@leepergroup.com DATE: June 03, 2014
RINEX FILE: 0166153s.14o TIME: 10:49:29 UTC

SOFTWARE: rsgps 1.37 RS92.prl 1.99.2 START: 2014/06/02 18:59:30
EPHEMERIS: igu17951.eph [ultra-rapid] STOP: 2014/06/02 19:47:15
NAVFILE: brdc1530.14n OBS USED: 6516 / 7317 : 89%
ANT NAME: CHCX90D-OPUS NONE QUALITY IND. 26.71/ 50.03
ARP HEIGHT: 2.0000 NORMALIZED RMS: 0.355

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2014.41865)

X: 1329282.730(m) 0.006(m) 1329281.898(m) 0.006(m)
Y: -4675294.662(m) 0.007(m) -4675293.220(m) 0.007(m)
Z: 4115907.383(m) 0.010(m) 4115907.335(m) 0.010(m)

LAT: 40 26 51.09477 0.005(m) 40 26 51.12754 0.005(m)
E LON: 285 52 17.56090 0.006(m) 285 52 17.54368 0.006(m)
W LON: 74 7 42.43910 0.006(m) 74 7 42.45632 0.006(m)
EL HGT: -30.804(m) 0.011(m) -32.064(m) 0.011(m)
ORTHO HGT: 1.539(m) 0.016(m) [NAVD88 (Computed using GEOID12A)]

	UTM COORDINATES	STATE PLANE COORDINATES
	UTM (Zone 18)	SPC (2900 NJ)
Northing (Y) [meters]	4477794.876	179268.581
Easting (X) [meters]	573907.310	181516.423
Convergence [degrees]	0.56544136	0.24104211
Point Scale	0.99966724	0.99991222
Combined Factor	0.99967207	0.99991705

US NATIONAL GRID DESIGNATOR: 18TWK739077794(NAD 83)

1.539
X 3.280833333

5.049202445

99.835
- 5.049

94.7857
9751

ICC-ES Evaluation Report**ESR-2074***

Reissued December 2012

This report is subject to renewal February 1, 2015.

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:****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:
FLOODVENT™ MODEL #1540-520; FLOODVENT™
STACKING MODEL #1540-521; SMARTVENT™ MODEL
#1540-510; SMARTVENT™ STACKING MODEL #1540-511;
WOOD WALL FLOOD MODEL #1540-570; WOOD WALL
FLOOD OVERHEAD DOOR MODEL #1540-574;
FLOODVENT™ OVERHEAD DOOR MODEL #1540-524;
SMARTVENT™ OVERHEAD DOOR MODEL #1540-514****1.0 EVALUATION SCOPE**

Compliance with the following codes:

- 2009 and 2006 *International Building Code*® (IBC)
- 2009 and 2006 *International Residential Code*® (IRC)

Properties evaluated:

- Physical operation
- Water flow

2.0 USES

The Smart Vent® units are automatic foundation flood vents (AFFVs) employed to equalize hydrostatic pressure on nonfire-resistance-rated foundation walls, rolling-type overhead doors and building walls subject to rising or falling flood waters. The Smart Vent® units are intended for use where flood hazard areas have been established in accordance with IBC Section 1612.3 or IRC Section R3222.1. Certain models also allow natural ventilation in accordance with Section 1203 of the IBC or Section 408.1 of the IRC.

3.0 DESCRIPTION**3.1 General:**

When subjected to pressure from rising water, the Smart Vent® AFFVs disengage, 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 AFFV 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 plate to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. 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 AFFVs comply with the design principle noted in Section 2.6.2.2 of ASCE/SEI 24 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 AFFVs must be installed in accordance with Section 4.0.

3.3 Model Sizes:

The FloodVENT™ Model #1540-520, SmartVENT™ Model #1540-510, FloodVENT™ Overhead Door Model #1540-524, and SmartVENT™ Overhead Door Model #1540-514 units measure 15³/₄ inches wide by 7³/₄ inches high (400 by 196.9 mm). The Wood Wall Flood Model #1540-570 and Wood Wall Flood Overhead Door Model #1540-574 units measure 14 inches wide by 8³/₄ inches high (355.6 by 222.25 mm). The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units measure 16 inches wide by 16 inches high (406.4 by 406.4 mm).

3.4 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 AFFVs recognized in this report do not offer natural ventilation.

4.0 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. The mounting straps allow mounting in wood, masonry and

*Revised June 2014

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concrete walls up to 12 inches (305 mm) thick. In order to comply with the engineer's opening design principle noted in Section 2.6.2.2 of ASCE/SEI 24, the Smart Vent® AFFVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one AFFV 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 AFFV for every 400 square feet (37.2 m²) of enclosed area.
- Below the base flood elevation.
- With the bottom of the AFFV located a maximum of 12 inches (305.4 mm) above grade.

5.0 CONDITIONS OF USE

The Smart Vent® AFFVs 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® AFFVs 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® AFFVs 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 Automatic Foundation Flood Vents (AC364), dated October 2013 (editorially revised May 2014).

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).

ICC-ES Evaluation Report**ESR-2074 FBC Supplement**

Issued July 2013

*This report is subject to renewal February 1, 2015.***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:**

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(877) 441-8368
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EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: FLOODVENT™ MODEL #1540-520; FLOODVENT™ STACKING MODEL #1540-521; SMARTVENT™ MODEL #1540-510; SMARTVENT™ STACKING MODEL #1540-511; WOOD WALL FLOOD MODEL #1540-570; WOOD WALL FLOOD OVERHEAD DOOR MODEL #1540-574; FLOODVENT™ OVERHEAD DOOR MODEL #1540-524; SMARTVENT™ OVERHEAD DOOR MODEL #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:

- 2010 *Florida Building Code—Building* (FBC)
- 2010 *Florida Building Code—Residential* (FRC)

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 FBC and the FRC, provided the design and installation are in accordance with the *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 FBC and the FRC for structures not subject to FBC Section 2326.3.1 or FRC Section 4409.13.3.1, as applicable.

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 December 1, 2012, revised June 2014.