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

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008
Expires March 31, 2012

SECTION A - PROPERTY INFORMATION

For Insurance Company Use:

A1. Building Owner's Name City of Albany

Policy Number

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
635 Gilbert Lane

Company NAIC Number

City Albany State GA ZIP Code 31701

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
Tax Parcel No 00012/00005/032, Lot 62, Riverroad S/D, Phase 5

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

A5. Latitude/Longitude: Lat. 31d 32' 0.15" N Long. 84d 09' 49"W 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 8

A8. For a building with a crawlspace or enclosure(s):
- a) Square footage of crawlspace or enclosure(s) 1515 sq ft
- b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 15
- c) Total net area of flood openings in A8.b 1650 sq in
- d) Engineered flood openings? ☒ Yes ☐ No

A9. For a building with an attached garage:
- a) Square footage of attached garage 235 sq ft
- b) No. of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 2
- c) Total net area of flood openings in A9.b 250 sq in
- d) Engineered flood openings? ☒ Yes ☐ No

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
City of Albany 130075	Dougherty	Georgia

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
13095C0116E	E	September 25, 09	September 25, 09	A	181.0

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 (Describe) _____

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☒ NAVD 1988 ☐ Other (Describe) _____

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. Use the same datum as the BFE.

Benchmark Utilized COA GPS 276 Vertical Datum NAVD 1988

Conversion/Comments _____

			Check the measurement used.
a)	Top of bottom floor (including basement, crawlspace, or enclosure floor)	177.30	☒ feet ☐ meters (Puerto Rico only)
b)	Top of the next higher floor	182.02	☒ feet ☐ meters (Puerto Rico only)
c)	Bottom of the lowest horizontal structural member (V Zones only)	NA	☐ feet ☐ meters (Puerto Rico only)
d)	Attached garage (top of slab)	177.64	☒ feet ☐ meters (Puerto Rico only)
e)	Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	182.15	☒ feet ☐ meters (Puerto Rico only)
f)	Lowest adjacent (finished) grade next to building (LAG)	177.30	☒ feet ☐ meters (Puerto Rico only)
g)	Highest adjacent (finished) grade next to building (HAG)	177.50	☒ feet ☐ meters (Puerto Rico only)
h)	Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	177.75	☒ feet ☐ meters (Puerto Rico only)

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

Charles R. Hutchinson 12-12-12

Certifier's Name Charles R. Hutchinson License Number Georgia RLS 2639

Title Civil Engineering Superintendent Company Name City Of Albany

Address 240 Pine Avenue, Suite 200 City Albany State GA ZIP Code 31701

Signature Charles R. Hutchinson Date 12-12-2012 Telephone 229 883 6955

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. 635 Gilbert Lane	Policy Number
City AlbanyState GA ZIP Code 31701	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 The flood vents include 9 conventional vents @ 50 square inches and 6 Smart Vents rated at 200 square inched per vent. Smart vent data sheets are attached.

Charles R. Hutchinson

Signature Date 12-12-2012

☒ Check here if attachments

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

☐ 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 and G9.

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-G9) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate Of Compliance/Occupancy Issued

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 (PR) Datum _____

G9. BFE or (in Zone AO) depth of flooding at the building site: _____._____ ☐ feet ☐ meters (PR) Datum _____

G10. Community's design flood elevation _____._____ ☐ feet ☐ meters (PR) Datum _____

Local Official's Name Title

Community Name Telephone

Signature Date

Comments

☐ Check here if attachments

Building Photographs

See Instructions for Item A6.

	For Insurance Company Use:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 635 Gilbert Lane	Policy Number
City Albany State GA ZIP Code 31701	Company NAIC Number

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two 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." If submitting more photographs than will fit on this page, use the Continuation Page, following.

1

FRONT VIEW

September 25, 2012

REAR VIEW

December 12, 1012

Building Photographs

Continuation Page

	For Insurance Company Use:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 635 Gilbert Lane	Policy Number
City Albany State Ge ZIP Code 31701	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."

LEFT SIDE ELEVATION

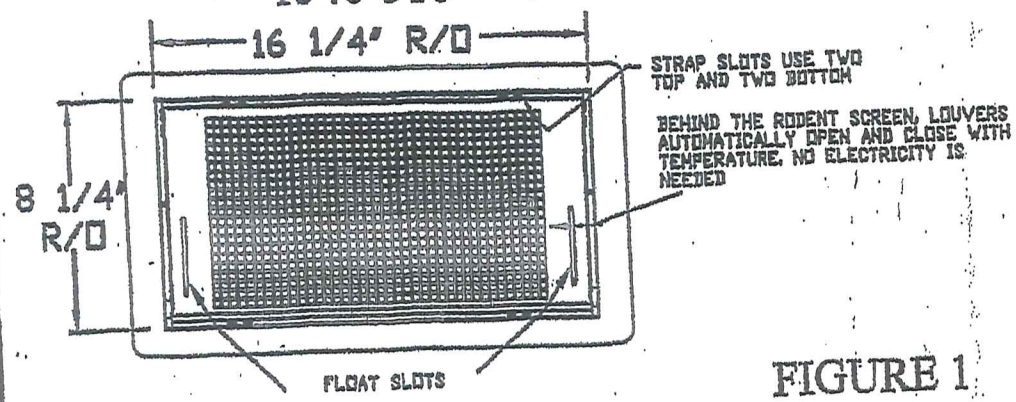
December 12, 2012

RIGHT SIDE ELEVATION

December 12, 2012

DETAIL DIAGRAM
MODELS 1540-510 & 1540-520
DUAL FUNCTION FLOOD AND VENTILATION VENT & FLOOD VENT INSULATED

1540-510



1540-520

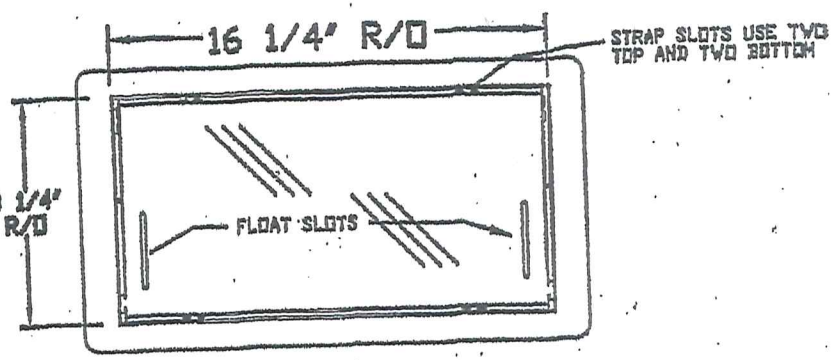


FIGURE 1

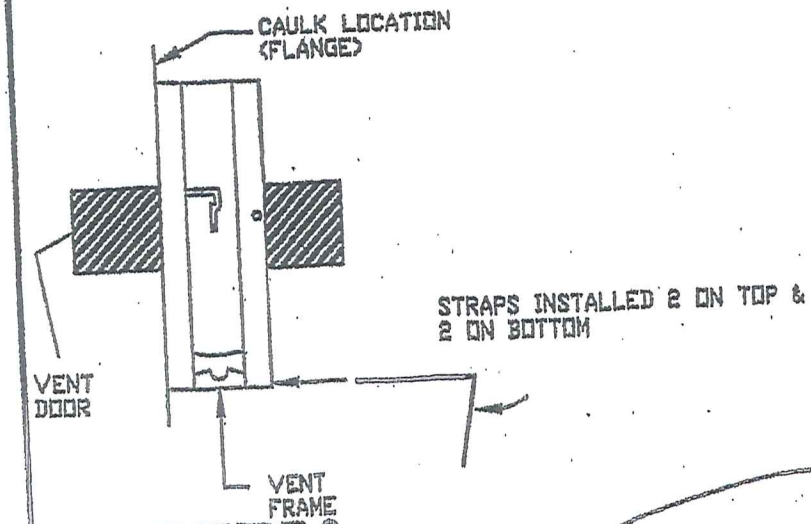


FIGURE 2

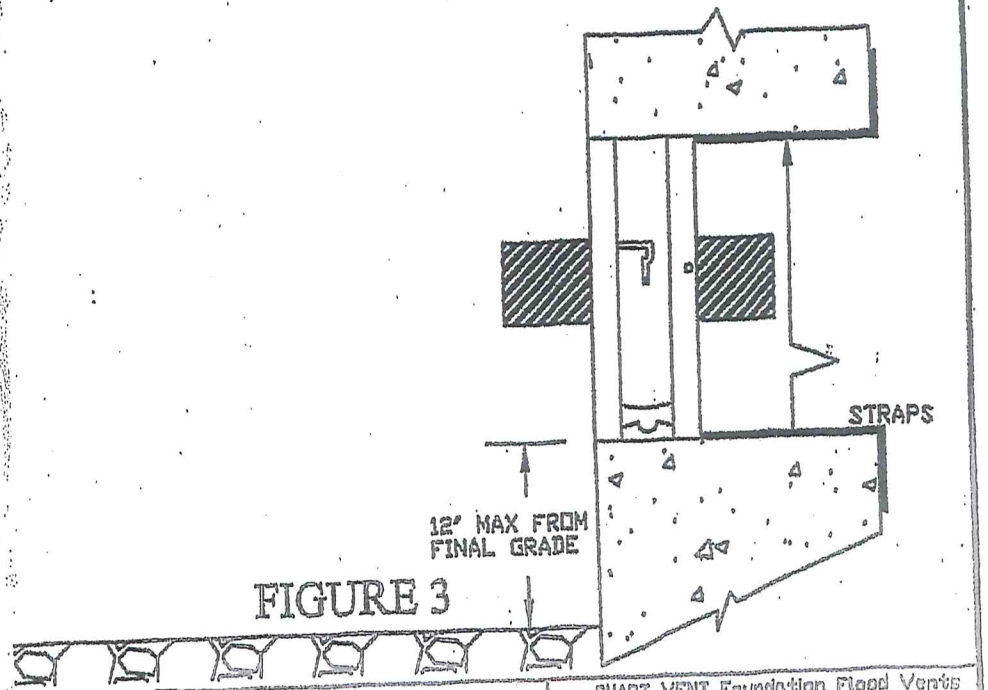
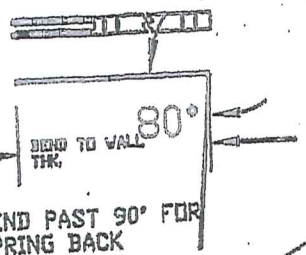


FIGURE 3

STRAP DETAIL.

TEETH MUST CLICK IN TIGHT TO INSURE SECURE INSTALLATION.



TOLERANCES UNLESS OTHERWISE SPECIFIED: .XX +/-0.03, .XXX +/-0.03, .XXXX +/-0.003	Smart VENT 877-441 8368 WWW.SMARTVENT.COM	SMART VENT Foundation Flood Vents, 450 Andbro Dr, Pitman NJ 08071
		DUAL FUNCTION FLOOD AND VENTILATION VENT & FLOOD VENT INSULATED MODELS 1540-510 & 1540-520
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SMART VENT INC. ANY REPRODUCTION OR USE OF THIS INFORMATION WITHOUT THE WRITTEN PERMISSION OF SMARTVENT	SIZE A / DWG NO. 1540-5XX / REV C	
	DATE 2-1-07	SHEET 1 OF 2

Smart VENT
877-441-8368
www.smartvent.com

INSTALLATION INSTRUCTIONS & DETAILS

MODELS 1540-510 & 1540-520
DUAL FUNCTION FLOOD AND VENTILATION VENT & FLOOD VENT INSULATED

REV. C 05-01-09

INSTALLATION INSTRUCTIONS

1. Remove vent door from vent frame. (Turn upside down, rotate bottom of door outward and slide out)
2. Prepare a CLEAN 16.25" wide by 8.25" high rough opening (approx. 1 block wide X 1 block high) for each vent. Ensure the bottom of the rough opening is no more than 12" above the finished inside or outside grade whichever is higher
3. Apply a bead of polyurethane caulk around the back of the flange on the vent frame. (FIG. 2)
4. Bend the 4 steel straps to the thickness of the wall measuring from the end with the teeth see STRAP DETAIL
5. Insert the top straps into the top two strap slots about two clicks.
6. Insert the vent frame in the cut opening. The bent strap ends go in then up behind the inside of the wall. Push the frame tight against the face of the wall. Ensure the frame is flush and square in the opening. (FIG. 3)
7. Reach through the vent opening and click the two straps in while holding the front of the vent against the wall face. The sharp point of the straps should not extend past the front of the vent face. Install the two remaining bottom straps.
8. Re-check that frame is square and slots are clear of debris, and caulk.
9. Install the door into frame by grasping the bottom of door (with float pins down) and front (small screen in front). Slide door into frame and rotate until it is latched.
10. To open the door insert two credit cards into the float slots as shown in the diagram. This will unlatch the door for removal and cleaning.

MODEL 1540-510

DETAILED SPECIFICATIONS:

MATERIAL: STAINLESS STEEL
OPERATION FLOOD: AUTOMATIC NON-POWERED ACTIVATION AND OPERATION
VENT REMAINS CLOSED AND LOCKED UNTIL ACTIVATED
OPERATION AIR: AUTOMATIC LOUVERS FULLY OPEN AT 75 DEG. FULLY CLOSED AT 35 DEG. NO POWER REQUIRED

INSTALLATION:
SECURED W/ 4 STAINLESS STEEL STRAPS SUPPLIED
HYDROSTATIC RELIEF: 200 Sq. Ft per Vent
VENTILATION: 51 Sq. In. per Vent NOTE: VAPOR BARRIER ALLOWS FOR REDUCED VENTILATION
REQUIREMENTS FLOOD: MINIMUM OF 2 VENTS PER ENCLOSED AREA MOUNTED ON AT LEAST TWO DIFFERENT WALLS
COLORS: STAINLESS (STANDARD)
EXTERIOR POWDER COATED WHITE, WHEAT, GRAY, AND BLACK (AVAILABLE)

MODEL 1540-520

DETAILED SPECIFICATIONS:

MATERIAL: STAINLESS STEEL
OPERATION: AUTOMATIC NON-POWERED ACTIVATION AND OPERATION

INSTALLATION:
SECURED W/ 4 STAINLESS STEEL STRAPS SUPPLIED
HYDROSTATIC RELIEF: 200 Sq. Ft per Vent
REQUIREMENTS: MINIMUM OF 2 VENTS PER ENCLOSED AREA MOUNTED ON AT LEAST TWO DIFFERENT WALLS

COLORS: STAINLESS (STANDARD)
EXTERIOR POWDER COATED WHITE, WHEAT, GRAY, AND BLACK (AVAILABLE)

MEETS THE REQUIREMENTS FOR ENGINEERED OPENINGS AS SET FORTH BY:
FEMA, NFIP, ICC, & ASCE
SUPPORTIVE DOCUMENTS, TB 1-08, 44CFR 60.3(C)(5), ASCE 24-05
ICC EVALUATION # ESR-2074 EVALUATED UNDER AC-364

ICC-ES Evaluation Report

ESR-2074

Reissued February 1, 2009

This report is subject to re-examination in two years.

www.icc-es.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

DIVISION: 10—SPECIALTIES
Section: 10230—Vents

REPORT HOLDER:

SMART VENT®, INC.
450 ANDBRO DRIVE, SUITE 2B
PITMAN, NEW JERSEY 08071
(856) 307-1468
www.smartvent.com
eval@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:

- 2006 *International Building Code®* (IBC)
- 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. 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, and each opening provides 76 square inches (49 032 mm^2) of net free area for flood mitigation in the open position. The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units each contain two vertically arranged openings per unit, providing 152 square inches (98 064 mm^2) of net free area for flood mitigation in the open position.

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 $15^3/_4$ inches wide by $7^3/_4$ 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 $8^3/_4$ 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 mm^2) 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 mm^2) 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 concrete walls up to 12 inches (305 mm) thick. In order to

comply with the engineered 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 m^2) 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 m^2) 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 2007.

7.0 IDENTIFICATION

The Smart VENT®,models recognized in this report must be identified by a label bearing the manufacturer's name (Smart Vent, Inc.), the model number, and the evaluation report number (ESR-2074).