U.S. DEPÄRIMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY National Flood Insurance Program

ELEVATION CERTIFICATE

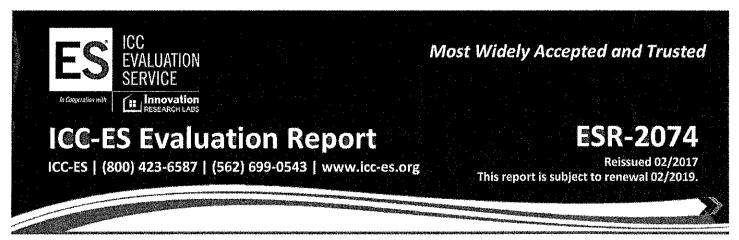
Important: Read the instructions on pages 1–9

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

Building Oxner's Name John & Cheryl Calman			important. N	teau t		ıı paç	ges i–s.	Схрпа	THOT Bate. duly 01, 2010
A2. Building Street Address (including Apt., Unit, Suite, and/or Blog. No.) or P.O. Route and Box No. Company NAIC Number: City Margate State NJ ZP Code 08402 A3. Properly Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) A3. Properly Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessary, etc.) A5. Expensive Legal State (e.g., Residential) A6. Latitudes (particular Lat.) A6. Allocation (Lot and Block Numbers) A6. Latitudes (particular Lat.) A6. Building (Lot and Block Numbers) A6. Expensive Legal State (e.g., Residential) A6. Building (Lot and Block Numbers) A7. Building (Lot and Block Numbers) A8. For a building with a crawfapea or enclosure(s) B7. Building (Lot and Block) B8. For a building with a crawfapea or enclosure(s) B1. Super (Lot and Block) B8. For a building with a crawfapea or enclosure(s) B9. Super (Lot and Block) B9.				TION	A - PROPERTY INF	ORM	ATION	FOR IN	SURANCE COMPANY USE
State N. ZIP Code 08402	Building Owner's Nam	e John & Chery	Calnan				3	Policy N	lumber:
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Block 40/0.1 Lot 8 Block 40/0.1 Lot 8 A5. Lathursten, orgitude: Lat, N.396/27-23* Long, W.745-37-14* A5. Lathursten, orgitude: Lat, N.396/27-23* Long, W.745-37-14* A5. Lathursten, orgitude: Lat, N.396/27-23* Long, W.745-37-14* A7. Building Diagram Number 8 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 crawspace or enclosure(s)		s (including Apt.	Unit, Suite, and/or	Bldg. N	lo.) or P.O. Route and	Box No	0.	Compa	ny NAIC Number:
Block 400 cf Lot 8 4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential A5. Lattlodet Congruete: Lat, 1/38/2012072. Long, W. 745/307-147 A6. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential A6. Lattlodet Congruete: Lat, 1/38/2012072. Long, W. 745/307-147 A6. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential A6. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential A6. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential A6. Building Use (e.g., Residential) A6. Building elevation are based on Community Durber (ERS) sare or Otherwise Protected Area (OPA)? B7. FIRM Panel B8. Flood B8. Building Use (e.g., Residential) A7. Building elevation are based on Community Defermined B9. Building elevation are based on Community Defermined A7. Building elevation are based on Community Defermined B9. Building elevation are based on Construction Drawings' B9. Buil	City Margate				State NJ ZIP C	ode 0	8402		
A5. Latifudel.conjuder: Lat. N_396_201_22* Long. W_746_301_42* A7. Budding Diagram Number 8 A8. For a building with a crawsbapec or enclosure(s) a) Square flotage of crawsbapec or enclosure(s) b) Number of permanent flood openings in the crawsbapec or enclosure(s) b) Number of permanent flood openings in the crawsbapec or enclosure(s) within 1.0 floot above adjacent grade c) Total net are as of flood openings in A8. b		Lot and Block Nu	mbers, Tax Parcel	Numbe	r, Legal Description, et	C.)	34%		
B1. NFIP Community Name & Community Number Margate City, 345304 B4. Map/Panel Number B5. Suffix B6. FIRM Index Date May 30, 2014 B7. FIRM Panel May 30, 2014 B7. FIRM Panel May 30, 2014 B8. Flood A6. use base Flood Elevation(s) (Zone A0. use base flood depth) B8. Flood A6. use base flood depth) B8. Flood B8. Floo	A5. Latitude/Longitude: La A6. Attach at least 2 photo A7. Building Diagram Num A8. For a building with a ci a) Square footage of b) Number of perman or enclosure(s) with c) Total net area of flo	t. N 39d-20'-23" graphs of the but ber 8 rawlspace or encorawlspace or endent flood opening in 1.0 foot above od openings in 1	Long. W 74d-30'-1 Ilding if the Certifica losure(s): closure(s) gs in the crawlspace e adjacent grade 88.b	4" te is be 1114 e 6	aing used to obtain floor A9. I sq ft sq in	For a b a) Squ b) Nui with c) Tot	ance. puilding with an attacuare footage of attacuare footage of attacuare of permanent nin 1.0 foot above a lal net area of flood	ched gar ched gar flood ope djacent g openings	age: rage <u>n/a</u> sq ft enings in the attached garage grade <u>0</u> s in A9.b <u>0</u> sq in
B1. NFIP Community Name & Community Number Margate City, 345304 B4. Map/Panel Number B5. Suffix B6. FIRM Index Date May 30, 2014 B7. FIRM Panel May 30, 2014 B8. Flood AC, use base flood Elevation(s) (Zone AO, use base flood depth) 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: Preliminary FIRM B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/Source: Preliminary FIRM B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/Source: Preliminary FIRM B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/Source: Preliminary FIRM B11. Indicate elevation of actinate and in a Coastal Barrier Resources System (CBRS) area or Otherwise Profeeted Area (OPA)? Yes No Designation Date: SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED) D21. Building elevations are based on: Construction Drawings' Building Under Construction* Finished Construction Annual Prelimary Firm May	a) <u></u>			INSU					
Margale City, 345304 B5. Suffix B6. FIRM Index Date B7. FIRM Panel B8. Flood Surptive Sur		0.20	12002	11100	TO THOSE TO THE TOTAL	(1 11 41	in in Gradi, trie		
SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)		& Community N	umber						e
FIS Profile FIRM Community Determined Mode Other/Source: Mode Other/Source: Mode Other/Source: Mode Other/Source: Mode Mode Other/Source: Mode Mo	· · · · · · · · · · · · · · · · · · ·				Effective/Revised D	ate	Zone(s)		AO, use base flood depth)
SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED) 1. Building elevations are based on:	☐ FIS Profile ☐ FIRM ☐ Community Determined ☐ Other/Source: Preliminary FIRM #11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☐ NAVD 1988 ☐ Other/Source: #12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☐ No								
21. Building elevations are based on:		SECTIO	N.C BUILDING				SURVEY REQUIS	PED)	
Check the measurement used. a) Top of bottom floor (including basement, crawlspace, or enclosure floor) 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 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 Certifier's Name James R. Boney License Number 31264 Telect meters Address 13 Stone Mill Ct City Egg Harbor Twp State NJ ZIP Code 08234	*A new Elevation Certific 22. Elevations – Zones A1– below according to the b Benchmark Utilized: GP Indicate elevation datum	pased on: cate will be required. A30, AE, AH, A (puilding diagram S	Construction Dr ed when construction with BFE), VE, V1– specified in Item A7 vations in items a) t	rawings on of th V30, V . In Pue Vert hrough	* ☐ Building e building is complete. (with BFE), AR, AR/A, erto Rico only, enter mitical Datum: 1988 h) below. ☐ NGVD 19	Under AR/AE eters.	Construction* E, AR/A1–A30, AR/A	∑ Fi	AO. Complete Items C2.a-h
b) Top of the next higher floor c) Bottom of the lowest horizontal structural member (V Zones only) d) Attached garage (tóp 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 g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation of deck or stairs, including structural support g) Highest adjacent grade at lowest elevation at l	Datum used for building	elevations must	be the same as tha	i useu i	of the BFE.		Check	the mea	surement used.
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 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 Certifier's Name James R. Boney License Number 31264 1e Land Surveyor Company Name James R. Boney & Associates, LLC Address 13 Stone Mill Ct City Egg Harbor Twp State NJ ZIP Code 08234	b) Top of the next higherc) Bottom of the lowest h	floor norizontal structu				<u>13.29</u> n/a	9	⊠ feet □ feet	meters meters
g) Highest adjacent (finished) grade next to building (HAG) h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support 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 Certifier's Name James R. Boney License Number 31264 Ile Land Surveyor Company Name James R. Boney & Associates, LLC Address 13 Stone Mill Ct City Egg Harbor Twp State NJ ZIP Code 08234	e) Lowest elevation of m	achinery or equi		buildin	g	_			
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 Certifier's Name James R. Boney License Number 31264 Ile Land Surveyor Company Name James R. Boney & Associates, LLC Address 13 Stone Mill Ct City Egg Harbor Twp State NJ ZIP Code 08234	g) Highest adjacent (finis	shed) grade next	to building (HAG)	s, includ	ding structural support	<u>8.6</u>			meters
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 □ Check here if attachments. □ licensed land surveyor? □ Yes □ No □ Certifier's Name James R. Boney □ License Number 31264 □ Land Surveyor □ Company Name James R. Boney & Associates, LLC Address 13 Stone Mill Ct □ City Egg Harbor Twp □ State NJ □ ZIP Code 08234		SECTIO	N D - SURVEYO	R, EN	GINEER, OR ARCH	ITEC	T CERTIFICATIO	N	
Certifier's Name James R. Boney License Number 31264 Ile Land Surveyor Company Name James R. Boney & Associates, LLC Address 13 Stone Mill Ct City Egg Harbor Twp State NJ ZIP Code 08234	information. <i>I certify that the I understand that any false s</i> Check here if comment	information on to statement may be s are provided o	nis Certificate repres e punishable by fine	sents m or impi Were	ny best efforts to interpr risonment under 18 U. latitude and longitude i	ret the S. Cod n Secti	data available. le, Section 1001. ion A provided by a		
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Address 13 Stone Mill Ct City Egg Harbor Twp State NJ ZIP Code 08234	9	он в у	Company Nama	lames !			1204		
							ode 08334		
	79	22						_	

rICATE, page 2

7					
in t	hese spaces, c	opy the corresponding informatio	n from Section A.	FOR II	NSURANCE COMPANY USE
street Addre 221 N Clermont ،		Unit, Suite, and/or Bldg. No.) or P.O. Ro	ute and Box No.	Policy	Number:
City Margate		State N	JJ ZIP Code 08402	Compa	any NAIC Number:
	SECTION	D - SURVEYOR, ENGINEER, OR A	ARCHITECT CERTIFIC	ATION (CONTIN	UED)
Copy both sides of the	nis Elevation Certi	ficate for (1) community official, (2) insura	nce agent/company, and (3) building owner.	
Comments Two and	d one-half story fra	ame dwelling on conc block foundation cr	awlspace. A/C is on platfor	m outside.	
Signature //	My _		Date May 26, 2015		
SECTION E -	BUILDING ELE	VATION INFORMATION (SURVEY	NOT REQUIRED) FOR	ZONE AO AND	ZONE A (WITHOUT BFE)
and C. For Items E1 E1. Provide elevati grade (HAG) a a) Top of botto b) Top of botto E2. For Building Di (elevation C2.b. E3. Attached garaç E4. Top of platform E5. Zone AO only:	-E4, use natural con information for nd the lowest adjam floor (including m floor (including agrams 6–9 with poin the diagrams) ge (top of slab) is a of machinery and If no flood depth	Vor equipment servicing the building is _number is available, is the top of the botton	nt used. In Puerto Rico onlooxes to show whether the great [and the content of th	y, enter meters. elevation is above meters above ee pages 8–9 of Ins below the HAG HAG. eters above or lance with the comi	or below the highest adjacent e or below the HAG. e or below the LAG. structions), the next higher floc
ordinance? L		Unknown. The local official must certify			TION
		F – PROPERTY OWNER (OR OWN			
		red representative who completes Section nents in Sections A, B, and E are correct			sued or community-issued BFI
or Zone AO must sign	n here. The staten	· · · · · · · · · · · · · · · · · · ·			sued or community-issued BFI
r Zone AO must sign Property Owner's or	n here. The staten	nents in Sections A, B, and E are correct d Representative's Name			sued or community-issued BF
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or Zone AO must sign Property Owner's or or Address Signature Comments e local official who is this Elevation Certific The informat is authorized	authorized by law attached ion in Section C w	SECTION G – COMMUNITY I or ordinance to administer the community applicable item(s) and sign below. Check was taken from other documentation that I elevation information. (Indicate the source	ity ate NFORMATION (OPTIO) 's floodplain management of the measurement used in It has been signed and seale and date of the elevation	State Telephone NAL) rdinance can compeems G8–G10. In Ped by a licensed surdata in the Commo	ZIP Code Check here if attachm Lete Sections A, B, C (or E), an uerto Rico only, enter meters. Veyor, engineer, or architect vents area below.)
Property Owner's or on Address Signature Comments e local official who is this Elevation Certification is authorized in Address authorized in A community	authorized by law late. Complete the ion in Section C w official completed or official completed.	SECTION G – COMMUNITY I or ordinance to administer the community applicable item(s) and sign below. Check ras taken from other documentation that I elevation information. (Indicate the source it Section E for a building located in Zone	NFORMATION (OPTIOn State of the measurement used in lite of the elevation of the without a FEMA-issued to the measurement used in lite of the elevation of the without a FEMA-issued to the lite of the lite of the lite of the elevation o	NAL) rdinance can compems G8–G10. In Ped d by a licensed sur data in the Commercor community-issue.	ZIP Code Check here if attachm Lete Sections A, B, C (or E), an uerto Rico only, enter meters. Veyor, engineer, or architect vents area below.)
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or Zone AO must sign Property Owner's or or Address Signature Comments The local official who is this Elevation Certification and is authorized is authorized. The following G4. Permit Number This permit has bear of as-but of the property of the permit has bear of the permit has been of the permi	authorized by law authorized by law authorized by law ate. Complete the ion in Section C w by law to certify a finite or information (Item authorized information (Item authorized) information (Item authorized) authorized by law authorized by	SECTION G – COMMUNITY I Or ordinance to administer the community applicable item(s) and sign below. Check was taken from other documentation that I elevation information. (Indicate the source is G4–G10) is provided for community flows G5. Date Permit Issued New Construction Substancluding basement) of the building:	ity ate NFORMATION (OPTIO) 's floodplain management of the measurement used in It has been signed and seale e and date of the elevation A (without a FEMA-issued odplain management purpode) G6. Date Certification in the imagement in the image	NAL) rdinance can complems G8–G10. In Production of the Community-issues of the Community-issues of the Compliance of Complianc	ZIP Code Check here if attachm lete Sections A, B, C (or E), an uerto Rico only, enter meters. veyor, engineer, or architect vents area below.) led BFE) or Zone AO.
or Zone AO must sign Property Owner's or or Address Signature Comments e local official who is this Elevation Certific The informat is authorized. A community The following A Permit Number This permit has be a Elevation of as-bit or Community's des	authorized by law authorized by law authorized by law atte. Complete the ion in Section C will by law to certify a formation (Item of information (Item of insued for: will lowest floor (in AO) depth of flood ign flood elevation	SECTION G – COMMUNITY I or ordinance to administer the community applicable item(s) and sign below. Check ras taken from other documentation that I elevation information. (Indicate the source is G4—G10) is provided for community flor G5. Date Permit Issued New Construction Substa cluding basement) of the building: ng at the building site:	ity ate NFORMATION (OPTION STORMATION STORMATION (OPTION STORMATION (OPTION STORMATION STORMATION (OPTION STORMATION STORMATION (OPTION STORMATION STORMATION (OPTION STORMATION STORMATION STORMATION (OPTION STORMATION STORMATION STORMATION (OPTION STORMATION STORMA	NAL) rdinance can compems G8–G10. In Production of the Community-issues. cate Of Compliance meters Dature meters Dature meters Dature of the Community-issues.	ZIP Code Check here if attachm lete Sections A, B, C (or E), ar uerto Rico only, enter meters. veyor, engineer, or architect vents area below.) led BFE) or Zone AO. e/Occupancy Issued
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or Zone AO must sign Property Owner's or or Address Signature Comments The informat is authorized A community The following A community The following A community B CHA Permit Number This permit has be B Elevation of as-be B EFE or (in Zone A	authorized by law ate. Complete the ion in Section C w by law to certify e or official completed information (Item een issued for: will lowest floor (in AO) depth of flood ign flood elevation	SECTION G – COMMUNITY I or ordinance to administer the community applicable item(s) and sign below. Check ras taken from other documentation that I elevation information. (Indicate the source is G4—G10) is provided for community flor G5. Date Permit Issued New Construction Substa cluding basement) of the building: ng at the building site:	ity ate NFORMATION (OPTIO) s floodplain management of the measurement used in It has been signed and seale e and date of the elevation A (without a FEMA-issued odplain management purpode) G6. Date Certification feet receipted re	NAL) rdinance can compems G8–G10. In Production of the Community-issues. cate Of Compliance meters Dature meters Dature meters Dature of the Community-issues.	ZIP Code Check here if attachm lete Sections A, B, C (or E), an uerto Rico only, enter meters. veyor, engineer, or architect wents area below.) led BFE) or Zone AO. e/Occupancy Issued



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.

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: 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 $400 \text{ square feet } (37.2 \text{ m}^2) \text{ of enclosed area.}$

- 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

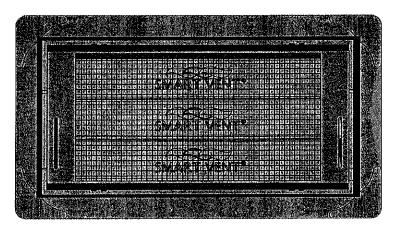


FIGURE 1—SMART VENT: MODEL 1540-510

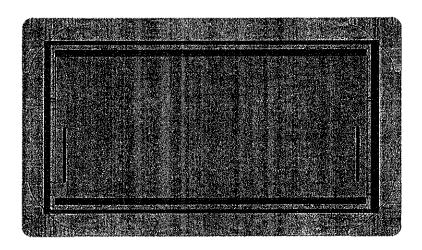


FIGURE 2-SMART VENT MODEL 1540-520

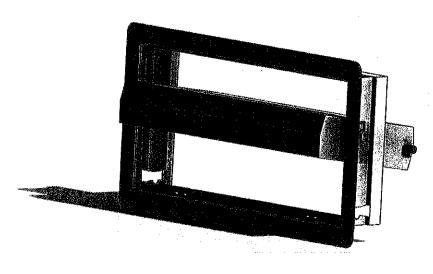


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN