U.S. DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency National Flood Insurance Program

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

ELEVATION CERTIFICATEImportant: Follow the instructions on pages 1–9.

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

	SECT	TON A - PROPERTY	NFOR	MATION		FOR INSUF	RANCE COMPANY USE
				Policy Num	ber:		
Sea Grape Propert	***************************************	L. Y A. (11 7 O 7	17				- AAAA
Box No.	Address (inc	luding Apt., Unit, Suite	, and/o	r Bldg. No.) or P.O.	Route and	Company N	IAIC Number:
#16-20 Douglass A	venue Unit A						
City CITY OF MARK	`ATE		1	State New Jersey		ZIP Code 08402	
		nd Block Numbers, Tax	Parce		scription etc \	00402	***************************************
Block 105 Lot 7	inpubli (Lot al	a block realibors, 1ax	. i aios	. Multiper, Legal pe	scription, etc.)		
A4. Building Use (e.g., Resident	tial, Non-Residential, A	ddition	, Accessory, etc.)	RESIDENTIAL		
A5. Latitude/Longit	ude: Lat. <u>39</u>	.3301	ong	74.4961	Horizontal Datur	n: 🔲 NAD 1	1927 🗵 NAD 1983
A6. Attach at least	2 photograph	ns of the building if the	Certific	ate is being used to	o obtain flood insur	ance.	
A7. Building Diagra	ım Number	8					
A8. For a building	with a crawlsp	pace or enclosure(s):				·	
a) Square foot	age of crawls	space or enclosure(s)		719 sq ft			
b) Number of p	permanent flo	od openings in the cra	wispac	e or enclosure(s) w	ithin 1.0 foot above	adjacent gra	ade 4
c) Total net an	ea of flood op	enings in A8.b80	0 s	sq in			
d) Engineered	flood opening	gs? 🗵 Yes 🗌 No)				
A9. For a building v	vith an attach	ed garage:					
a) Square foot	age of attach	ed garage315		sq ft			
b) Number of p	permanent flo	od openings in the atta	ached (garage within 1.0 fo	ot above adjacent	grade	2
c) Total net are	ea of flood op	enings in A9.b 4	00	sq in			
d) Engineered	flood opening	gs? ⊠ Yes □ N	5	_	,		
		- <u>-</u> _					
	SE	CTION B - FLOOD IN	ISURA	NCE RATE MAP	(FIRM) INFORMA	ATION-	
B1. NFIP Communi	•	•		B2. County Name			B3. State
CITY OF MARGAT	L & 3453	304		ATLANTIC COUN	ПΥ		New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date		IRM Panel ffective/	B8. Flood Zone(s		se Flood Elevation(s)
34001C0434	F		R	evised Date	Λ=	Floo	ne AO, use Base od Depth)
3400100434	F	08/28/2018	00/20	3/2018	AE	10	
B10. Indicate the s	ource of the E	Base Flood Elevation (l	BFE) d	ata or base flood de	enth entered in Item	n B9:	
1		Community Determ					
Dad Indiana day	45				U/D 4000 🗔 G	1	
BTT. Indicate eleva	illon datum ui	sed for BFE in Item B9	: [IN	GAD 1858 X ME	(AD 1888 O	her/Source:	
B12. Is the building	located in a	Coastal Barrier Resou	rces Sy	ystem (CBRS) area	or Otherwise Prot	ected Area (0	OPA)? 🗌 Yes 🗵 No
Designation E)ate:		BRS	☐ OPA			
L						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

ELEVATION CERTIFICATE

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

	RTANT: In these spaces, copy the corresponding information from		FOR INSURANCE COMPANY USE
Buildi #16-2	ng Street Address (including Apt., Unit, Suite, and/or Bidg. No.) or P.O. O Douglass Avenue Unit A	Route and Box No.	Policy Number:
City CITY	OF \$44 DO 5 TO	ZIP Code 08402	Company NAIC Number
	SECTION C - BUILDING ELEVATION INFOR	MATION (SURVE)	REQUIRED)
C1.	Building elevations are based on: Construction Drawings*	Building Under Con	struction* Finished Construction
	*A new Elevation Certificate will be required when construction of the b		
C2.	Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with Complete Items C2.a–h below according to the building diagram specifical Data Vertical Data (Cartes)	th BFE), AR, AR/A, ied in Item A7. In Pi um: NAVD88	AR/AE, AR/A1–A30, AR/AH, AR/AO. Jerto Rico only, enter meters.
	Indicate elevation datum used for the elevations in items a) through h) it	***************************************	
	☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source:	70,017.	
	Datum used for building elevations must be the same as that used for the	ne BFE.	
	a) Top of bottom floor (including basement, crawlspace, or enclosure f	loor) 8, 2	Check the measurement used.
	b) Top of the next higher floor	12 0	
	c) Bottom of the lowest horizontal structural member (V Zones only)	N/A	
	d) Attached garage (top of slab)	7.4	⊠ feet ☐ meters
		12.0	
	e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)		X feet meters
	f) Lowest adjacent (finished) grade next to building (LAG)	<u> </u>	x feet meters
	g) Highest adjacent (finished) grade next to building (HAG)	<u> </u>	X feet meters
	 Lowest adjacent grade at lowest elevation of deck or stairs, including structural support 	g <u>7.3</u>	X feet meters
	SECTION D – SURVEYOR, ENGINEER, OR	ARCHITECT CERT	TIFICATION
This i cen state	certification is to be signed and sealed by a land surveyor, engineer, or tify that the information on this Certificate represents my best efforts to be ment may be punishable by fine or imprisonment under 18 U.S. Code,	architect authorized nterpret the data av Section 1001.	l by law to certify elevation information. ailable. I understand that any false
	e latitude and longitude in Section A provided by a licensed land survey		•
	fier's Name License Number		
Title	M. Koelling, PLS, CFM NJ24GS 0432880)O	
	nsed Land Surveyor		
	pany Name	17.000000000000000000000000000000000000	Place
	Koelling & Associates, LLC NJ C.O.A. No. 24GA28256300		Seal
Addr 2161	ess Shore Road		Here Here
City Linw	State New Jersey	ZIP Code 08221	
Signa	ature Date 1-6-20	Telephone (609) 927-027	9
Сору	all pages of this Elevation Certificate and all attachments for (1) communit	y official, (2) insuran	ce agent/company, and (3) building owner.
	ments (including type of equipment and location, per C2(e), if applicable		
***C2 one () Smart Vents Model #1540-510 engineered for 200 sq. inches of net a a.) crawlspace enclosure (574 s.f.)(elev 8.2)Mechanical Closet in ga 1) Smart ventElevator Pit (27 sq. ft.) (elevation 6.3)Foyer (78 s.f.) space with a void/hole in the foundation	rage (40 sq. ft.) (ele	ev. 7.4) is vented thru to Crawispace with
****C	 exterior air unit (elev 12.1)furnace (elev 12.5)elevator equipm water heater (elev 15.5) 	nent (elev 12.0)	

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the correspon	ding information f	rom Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, ar #16-20 Douglass Avenue Unit A	nd/or Bldg. No.) or I	P.O. Route and Box No.	Policy Number:
City CITY OF MARGATE	State New Jersey	ZIP Code 08402	Company NAIC Number
SECTION E – BUILDING E FOR ZOI	LEVATION INFOR	RMATION (SURVEY NO A (WITHOUT BFE)	T REQUIRED)
For Zones AO and A (without BFE), complete Items E complete Sections A, B,and C. For Items E1–E4, use enter meters.	E1–E5. If the Certific natural grade, if av	cate is intended to suppor allable. Check the measu	t a LOMA or LOMR-F request, rement used. In Puerto Rico only,
E1. Provide elevation information for the following an the highest adjacent grade (HAG) and the lowest	nd check the approp t adjacent grade (L/	riate boxes to show whet NG).	ner the elevation is above or below
a) Top of bottom floor (including basement, crawlspace, or enclosure) is Top of bottom floor (including basement)			ters above or below the HAG.
 Top of bottom floor (including basement, crawlspace, or enclosure) is 	*	feet me	ters above or below the LAG.
E2. For Building Diagrams 6–9 with permanent flood the next higher floor (elevation C2.b in	openings provided	 . 	
the diagrams) of the building is E3. Attached garage (top of slab) is		[_] feet [_] me	
E4. Top of platform of machinery and/or equipment servicing the building is		feet me	ters above or below the HAG.
E5. Zone AO only: If no flood depth number is availal floodplain management ordinance? Yes	ble, is the top of the	bottom floor elevated in	accordance with the community's
SECTION F PROPERTY OV	VNER (OR OWNER	'S REPRESENTATIVE)	CERTIFICATION
The property owner or owner's authorized representations community-issued BFE) or Zone AO must sign here.	tive who completes The statements in S	Sections A, B, and E for Sections A, B, and E are c	Zone A (without a FEMA-issued or orrect to the best of my knowledge.
Property Owner or Owner's Authorized Representative	e's Name		
Address	, C	ity	State ZIP Code
Signature	D	ate	Telephone
Comments			
			•
•			Check here if attachments.

ELEVATION CERTIFICATE

OMB 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.	Policy Number:
#16-20 Douglass Avenue Unit A	
City State ZIP Code	Company NAIC Number
CITY OF MARGATE New Jersey 08402	
SECTION G - COMMUNITY INFORMATION (OPTIONAL	.)
The local official who is authorized by law or ordinance to administer the community's floodplain r Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and s used in Items G8–G10. In Puerto Rico only, enter meters.	nanagement ordinance can complete gn below. Check the measurement
G1. The information in Section C was taken from other documentation that has been signed engineer, or architect who is authorized by law to certify elevation information. (Indicate data in the Comments area below.)	and sealed by a licensed surveyor, the source and date of the elevation
G2. A community official completed Section E for a building located in Zone A (without a FE or Zone AO.	MA-issued or community-issued BFE)
G3. The following information (Items G4–G10) is provided for community floodplain manage	ement 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:	et meters Datum
G9. BFE or (in Zone AO) depth of flooding at the building site:	et meters Datum
G10. Community's design flood elevation:	et meters Datum
Local Official's Name Title Title CF	7
Community Name Tin Collantino CF Community Name Telephone MARGATE CF CON CF CON CF CON CF CON CF CON CF CF CF CF CF CF CF CF CF C	-822-1974
Signature // Date	1/7/2020
Comments (including type of equipment and location, per C2(e), if applicable)	
	Check here if attachments.

Building Photographs

See Instructions for Item A6.

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

#16-20 Douglass Avenue Unit A

City
State
New Jersey

See Instructions for Item A6.

For Insurance Company Use:

Policy Number

Company NAIC Number

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 on the reverse.





Front View - Date of Photograph: (See Photo Stamp)

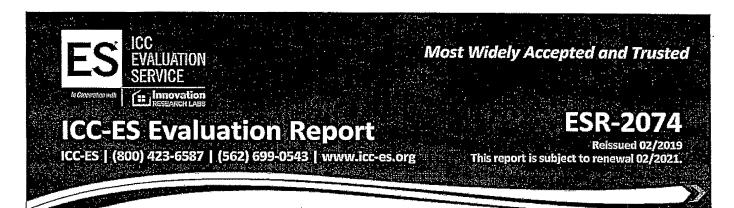
Rear View - Date of Photograph: (See Photo Stamp)





Right Side View - Date of Photograph: (See Photo Stamp)

Vent View - Date of Photograph: (See Photo Stamp)



DIVISION: 08 00 00—OPENINGS
SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

EVALUATION SUBJECT:

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



"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"



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ICC-ES Evaluation Report

ESR-2074

Reissued February 2019 This report is subject to renewal February 2021.

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A Subsidiary of the International Code Council®

DIVISION: 08 00 00-OPENINGS

Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

EVALUATION SUBJECT:

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

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018, 2015, 2012, 2009 and 2006 International Building Code® (IBC)
- 2018, 2015, 2012, 2009 and 2006 International Residential Code® (IRC)
- 2018 International Energy Conservation Code® (IECC)
- 2013 Abu Dhabi International Building Code (ADIBC)[†]

[†]The ADIBC is based on the 2009 IBC, 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Physical operation
- Water flow

2.0 USES

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

3.0 DESCRIPTION

3.1 General:

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

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

3.2 Engineered Opening:

The FVs comply with the design principle noted in Section 2.7.2.2 and Section 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)] for a maximum rate of rise and fall of 5.0 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Smart Vent FVs must be installed in accordance with Section 4.0.

3.3 Ventilation:

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

3.4 Flood Vent Sealing Kit:

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

4.0 DESIGN AND INSTALLATION

4.1 SmartVENT® and FloodVENT®:

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

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square



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

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

4.2 Flood Vent Sealing Kit

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

5.0 CONDITIONS OF USE

The Smart Vent® FVs described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The Smart Vent[®] FVs must be installed in accordance with this report, the applicable code and the manufacturer's installation instructions. In the event of a conflict, the instructions in this report govern. 5.2 The Smart Vent[®] FVs must not be used in the place of "breakaway walls" in coastal high hazard areas, but are permitted for use in conjunction with breakaway walls in other areas.

6.0 EVIDENCE SUBMITTED

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

7.0 IDENTIFICATION

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

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

TARI	F 1.	-MODE	SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.) 200	
FloodVENT®	1540-520	$15^3/_4" \times 7^3/_4"$		
SmartVENT [®]	1540-510	15 ³ / ₄ " × 7 ³ / ₄ "	200	
FloodVENT® Overhead Door	1540-524	$15^3/_4$ " $\times 7^3/_4$ "	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

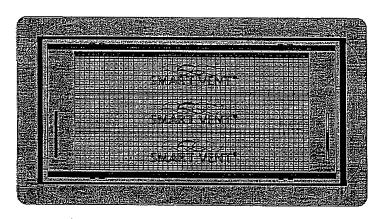


FIGURE 1-SMART VENT: MODEL 1540-510