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

OMB Control No. 1660-0008 Expiration Date: 06/30/2026

### ELEVATION CEPTIEICATE

Enderel Emergeney Management Agency	Expiration Date: 06/30/2026
Federal Emergency Management Agency National Flood Insurance Program	O CON
ELEVATION CERTIFICATE	Por Shu
IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION	DN PAGES 1-11
Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance a	FOR INSURANCE COMPANY USE
SECTION A - PROPERTY INFORMATION	
A1. Building Owner's Name: DONALD & KATHLEEN McCROSKEY	Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 791 BINNACLE POINT DRIVE	Company NAIC Number:
	ZIP Code: 34228
A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Nun LOT 106 EMERALD HARBOR, SECTION 2, PID#7891100005	ber:
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.):RESIDENTIAL	
	NAD 1927 🛛 NAD 1983 🗌 WGS 84
A6. Attach at least two and when possible four clear color photographs (one for each side) of the bu	ilding (see Form pages 7 and 8).
A7. Building Diagram Number:1B	NOV 0 5 2026
A8. For a building with a crawlspace or enclosure(s):	
a) Square footage of crawlspace or enclosure(s): N/A sq. ft.	TOWN OF LONGBOAT KEY Planning, Zoning & Building
b) Is there at least one permanent flood opening on two different sides of each enclosed area?	
c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot Non-engineered flood openings: <u>N/A</u> Engineered flood openings: <u>N/A</u>	above adjacent grade:
d) Total net open area of non-engineered flood openings in A8.c: N/A sq. in.	
e) Total rated area of engineered flood openings in A8.c (attach documentation - see Instruction	ns): <u>N/A</u> sq. ft.
f) Sum of A8.d and A8.e rated area (if applicable – see Instructions): N/A sq. ft.	
A9. For a building with an attached garage:	
a) Square footage of attached garage: 835 sq. ft.	
b) Is there at least one permanent flood opening on two different sides of the attached garage?	
c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adja Non-engineered flood openings:0 Engineered flood openings:5	
· · · · · · · · · · · · · · · · · · ·	
Non-engineered flood openings:0 Engineered flood openings:5	cent grade:
Non-engineered flood openings:       0       Engineered flood openings:       5         d) Total net open area of non-engineered flood openings in A9.c:       N/A sq. in.	cent grade:
Non-engineered flood openings:       0       Engineered flood openings:       5         d) Total net open area of non-engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c. (attach documentation – see Instruction f) Sum of A9.d and A9.e rated area (if applicable – see Instructions):       N/A sq. ft.         SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFOR	cent grade: ns): 1000 sq. ft. MATION
Non-engineered flood openings:       0       Engineered flood openings:       5         d) Total net open area of non-engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c: (attach documentation – see Instruction f) Sum of A9.d and A9.e rated area (if applicable – see Instructions):       N/A sq. ft.	cent grade: ns): 1000 sq. ft. MATION
Non-engineered flood openings:       0       Engineered flood openings:       5         d) Total net open area of non-engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c. (attach documentation – see Instruction f) Sum of A9.d and A9.e rated area (if applicable – see Instructions):       N/A sq. ft.         SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFOR	cent grade: ns):1000_sq. ft. MATION
Non-engineered flood openings:       0       Engineered flood openings:       5         d) Total net open area of non-engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c:       N/A sq. in.         f) Sum of A9.d and A9.e rated area (if applicable – see Instructions):       N/A sq. ft.         SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFOR         B1.a. NFIP Community Name:       TOWN OF LONGBOAT KEY, FLORIDA       B1.b. NFIP Community	cent grade:         ns):       1000 sq. ft.         MATION         nunity Identification Number:       125126         2081C0291       B5. Suffix: F
Non-engineered flood openings:       0       Engineered flood openings:       5         d) Total net open area of non-engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c:       N/A sq. in.         f) Sum of A9.d and A9.e rated area (if applicable – see Instructions):       N/A sq. ft.         SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFOR         B1.a. NFIP Community Name:       TOWN OF LONGBOAT KEY, FLORIDA         B1.b. NFIP Comm       B3. State:       FL         B4. Map/Panel No.:       1	cent grade: ns):1000 sq. ft. MATION hunity Identification Number: <u>125126</u> 2081C0291B5. Suffix: F 11
Non-engineered flood openings:       0       Engineered flood openings:       5         d) Total net open area of non-engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instruction f) Sum of A9.d and A9.e rated area (if applicable – see Instructions):       N/A sq. fr.         SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFOR         B1.a. NFIP Community Name:       TOWN OF LONGBOAT KEY, FLORIDA       B1.b. NFIP Comm         B2. County Name:       MANATEE       B3. State:       FL       B4. Map/Panel No.: 1         B6. FIRM Index Date:       08/10/2021       B7. FIRM Panel Effective/Revised Date:       08/10/2021	cent grade: ns):1000 sq. ft. MATION hunity Identification Number: <u>125126</u> 2081C0291B5. Suffix: F 11
Non-engineered flood openings:       0       Engineered flood openings:       5         d) Total net open area of non-engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instruction f) Sum of A9.d and A9.e rated area (if applicable – see Instructions):       N/A sq. ft.         SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFOR       B1.a. NFIP Community Name: TOWN OF LONGBOAT KEY, FLORIDA       B1.b. NFIP Comm         B2. County Name:       MANATEE       B3. State: FL       B4. Map/Panel No.: 1         B6. FIRM Index Date:       08/10/2021       B7. FIRM Panel Effective/Revised Date:       08/10/202         B8. Flood Zone(s):       AE       B9. Base Flood Elevation(s) (BFE) (Zone AO, use B       B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9:	cent grade:         ns):       1000       sq. ft.         MATION       125126         nunity Identification Number:       125126         2081C0291       B5. Suffix: F         :1
Non-engineered flood openings:       0       Engineered flood openings:       5         d) Total net open area of non-engineered flood openings in A9.c:       N/A sq. in.         e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instruction f) Sum of A9.d and A9.e rated area (if applicable – see Instructions):       N/A sq. fr.         SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFOR         B1.a. NFIP Community Name:       TOWN OF LONGBOAT KEY, FLORIDA       B1.b. NFIP Comm         B2. County Name:       MANATEE       B3. State:       FL       B4. Map/Panel No.: 1         B6. FIRM Index Date:       08/10/2021       B7. FIRM Panel Effective/Revised Date:       08/10/202         B8. Flood Zone(s):       AE       B9. Base Flood Depth entered in Item B9:       E10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9:       FIRM       Community Determined       Other:	cent grade:         ns):       1000 sq. ft.         MATION         nunity Identification Number:       125126         2081C0291       B5. Suffix: F         11

FEMA Form FF-206-FY-22-152 (formerly 086-0-33) (8/23)

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ELEVATION CERTIFICATE			BLOGA		
IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INST			Con ERMIN		
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box N 791 BINNACLE POINT DRIVE	NO		ICE COMPANYUSE		
			hicy Number:		
SECTION C - BUILDING ELEVATION INFORMATION (S	URVEY REQ	UIRED)			
C1. Building elevations are based on: Construction Drawings* Building Under	Construction*		d Construction		
*A new Elevation Certificate will be required when construction of the building is comp C2. Elevations – Zones A1–A30, AE, AH, AO, A (with BFE), VE, V1–V30, V (with BFE), A		F. AR/A1-A	30. AR/AH. AR/AO.		
A99. Complete Items C2.a-h below according to the Building Diagram specified in Ite Benchmark Utilized: NGS DATAPOINT Z689 Vertical Datum: NAV	em A7. In Puerto	Rico only,	enter meters.		
Indicate elevation datum used for the elevations in items a) through h) below.					
Datum used for building elevations must be the same as that used for the BFE. Conversion If Yes, describe the source of the conversion factor in the Section D Comments area.	on factor used?	Yes Check th	No Ne measurement used:		
a) Top of bottom floor (including basement, crawlspace, or enclosure floor):	9.0				
b) Top of the next higher floor (see Instructions):	22.3	5 🔀 feet	meters		
c) Bottom of the lowest horizontal structural member (see Instructions):	N/A	🛛 🖂 feet	meters		
d) Attached garage (top of slab):	7.2	🛛 feet	meters		
<ul> <li>e) Lowest elevation of Machinery and Equipment (M&amp;E) servicing the building (describe type of M&amp;E and location in Section D Comments area):</li> </ul>	9.0	🛛 🖂 feet	meters		
f) Lowest Adjacent Grade (LAG) next to building: 🔲 Natural 🔀 Finished	6.1	🛛 feet	meters		
g) Highest Adjacent Grade (HAG) next to building: 🗌 Natural 🔀 Finished	6.9	🛛 🖂 feet	meters		
<ul> <li>h) Finished LAG at lowest elevation of attached deck or stairs, including structural support:</li> </ul>	6.1	🛛 feet	meters		
SECTION D - SURVEYOR, ENGINEER, OR ARCHITED	CT CERTIFIC	TION			
This certification is to be signed and sealed by a land surveyor, engineer, or architect auth information. I certify that the information on this Certificate represents my best efforts to in false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section	terpret the data	law to certify available. / u	elevation understand that any		
Were latitude and longitude in Section A provided by a licensed land surveyor? X Yes	🗌 No	NOV	0 5 2024		
Check here if attachments and describe in the Comments area.			ONGBOAT KEY		
Certifier's Name: JAMES B. AMBERGER License Number: PSM 633	3		AMBER		
Title: PRESIDENT		NINI AME CENS	ENUMBER		
Company Name: JIM AMBERGER LAND SURVEYING LLC		<i>[</i> / 6	333		
Address: 1055 S. TAMIAMI TRAIL, SUITE 110-B		10 et a			
City:         State:         FL         ZIP Code:         34	236	Planning, 7/ Planning, 7/ Pl	DRIDA		
Telephone: (941) 955-6333       Ext.: Email: bergertime@verizon.net		III Onal Su	rveyor ano		
Digitally signed by James B James B Amberger Date: 2024.10.25 11:32:43 -04'00' Date: 10/25/	1	Plac	AMBERGEN		
Signature:					
Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) instrance agent company, and (3) building owner. Comments (including source of conversion factor in C2; type of equipment and location per C2.e; and description of any attachments):					
A5: SCALED FROM LABINS WEBSITE A9(a/d):SMART VENT MODEL 1540-520. SEE ATTACHED ICC-ES REPORT C2e: AIR CONDITIONING COMPRESSOR LOCATED ON SOUTHWESTERLY S			ry attaoninentoj.		

ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION	PAGES 1-11
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:	FOR INSURANCE COMPANY USE
791 BINNACLE POINT DRIVE           City: TOWN OF LONGBOAT KEY         State: ZIP Code: 34228	Policy Number:
	Company NAIC Number:
SECTION E – BUILDING MEASUREMENT INFORMATION (SURVEY FOR ZONE AO, ZONE AR/AO, AND ZONE A (WITHOUT I	BFE)
For Zones AO, AR/AO, and A (without BFE), complete Items E1–E5. For Items E1–E4, use natural g intended to support a Letter of Map Change request, complete Sections A, B, and C. Check the mea enter meters.	grade, if available. If the Certificate is surement used. In Puerto Rico only,
Building measurements are based on: Construction Drawings* Building Under Constructio *A new Elevation Certificate will be required when construction of the building is complete.	
E1. Provide measurements (C.2.a in applicable Building Diagram) for the following and check the a measurement is above or below the natural HAG and the LAG.	ppropriate boxes to show whether the
a) Top of bottom floor (including basement, crawlspace, or enclosure) is:	above or below the HAG.
b) Top of bottom floor (including basement, crawlspace, or enclosure) is:	above or below the LAG.
E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or next higher floor (C2.b in applicable Building Diagram) of the building is:	9 (see pages 1–2 of Instructions), the ☐ above or ☐ below the HAG.
Building Diagram) of the building is:               feet meters           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:	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 ac floodplain management ordinance? Yes No Unknown The local official mu	st certify this information in Section G.
SECTION F - PROPERTY OWNER (OR OWNER'S AUTHORIZED REPRESEN	
The property owner or owner's authorized representative who completes Sections A, B, and E for Zo sign here. The statements in Sections A, B, and E are correct to the best of my knowledge	one A (without BFE) or Zone AO must
Check here if attachments and describe in the Comments area.	
Property Owner or Owner's Authorized Representative Name:	
Address:	
City: State:	ZIP Code:
City:        State:           Telephone:         Ext.:         Email:	
Telephone: Ext.: Email:	
Telephone:         Ext.:         Email:           Signature:	
Telephone:         Ext.:         Email:           Signature:          Date:	
Telephone:         Ext.:         Email:           Signature:	
Telephone:         Ext.:         Email:           Signature:	EIVED
Telephone:         Ext.:         Email:           Signature:	EIVED 5 2024 DNGBOAT KEY
Telephone:         Ext.:         Email:           Signature:	EIVED 5 2024 DNGBOAT KEY
Telephone:         Ext.:         Email:           Signature:	EIVED 5 2024 DNGBOAT KEY

ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: FOR INSURANCE COMPANY USE
791 BINNACLE POINT DRIVE       Policy Number:         City:       TOWN OF LONGBOAT KEY       State:       FL       ZIP Code:       34228         Company NAIC Number:       Company NAIC Number:       Company NAIC Number:       Company NAIC Number:
SECTION G - COMMUNITY INFORMATION (RECOMMENDED FOR COMMUNITY OFFICIAL COMPLETION)
The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Section A, B, C, E, G, or H of this Elevation Certificate. Complete the applicable item(s) and sign below when:
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 state law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)
G2.a. A local official completed Section E for a building located in Zone A (without a BFE), Zone AO, or Zone AR/AO, or when item E5 is completed for a building located in Zone AO.
G2.b. 🗌 A local official completed Section H for insurance purposes.
G3. In the Comments area of Section G, the local official describes specific corrections to the information in Sections A, B, E and H.
G4. The following information (Items G5–G11) is provided for community floodplain management purposes.
G5. Permit Number: G6. Date Permit Issued: Control of the second se
G7. Date Certificate of Compliance/Occupancy Issued:
G3.       □ In the Comments area of Section G, the local official describes specific corrections to the information in occurring A, D, E and The Galowing information (Items G5–G11) is provided for community floodplain management purposes.         G4.       □ The following information (Items G5–G11) is provided for community floodplain management purposes.         G5.       Permit Number:
G9.a. Elevation of as-built lowest floor (including basement) of the building:
G9.b. Elevation of bottom of as-built lowest horizontal structural member:
G10.a. BFE (or depth in Zone AO) of flooding at the building site:
G10.b. Community's minimum elevation (or depth in Zone AO) requirement for the lowest floor or lowest horizontal structural member:
G11. Variance issued? Yes No If yes, attach documentation and describe in the Comments area.
The local official who provides information in Section G must sign here. I have completed the information in Section G and certify that it is correct to the best of my knowledge. If applicable, I have also provided specific corrections in the Comments area of this section.
Local Official's Name: Title:
NFIP Community Name:
Telephone:         Ext.:         Email:
Address:
City:          State:         ZIP Code:
Signature: Date:
Comments (including type of equipment and location, per C2.e; description of any attachments; and corrections to specific information in Sections A, B, D, E, or H):
NOV 0 5 2024
TOWN OF LONGBOAT KEY Planning, Zoning & Building
manning, zoning & Bullong

	ANT: MUST FOLLOW THE INST	RUCTIONS ON INSTRUCTION	ON PAGES 1-11
Building Street Address (including A			FOR INSURANCE COMPANY USE
791 BINNACLE POINT DRIVE City: TOWN OF LONGBOAT K	EY State:FL	ZIP Code: 34228	Policy Number:      Company NAIC Number:
	- BUILDING'S FIRST FLOOI IRVEY NOT REQUIRED) (FO		
The property owner, owner's author	prized representative, or local floo or height for insurance purposes. th of a meter in Puerto Rico). <b>Ret</b>	dplain management official m Sections A, B, and I must also Ference the Foundation Typ	ay complete Section H for all flood zones be completed. Enter heights to the e Diagrams (at the end of Section H
H1. Provide the height of the top o	of the floor (as indicated in Founda	ation Type Diagrams) above t	he Lowest Adjacent Grade (LAG):
a) For Building Diagrams 1A floor (include above-grade floor crawlspaces or enclosure floor		feet	meters above the LAG
b) For Building Diagrams 2/ higher floor (i.e., the floor above enclosure floor) is:	A, 2B, 4, and 6–9. Top of next ve basement, crawlspace, or	feet	meters above the LAG
H2. Is <b>all</b> Machinery and Equipme H2 arrow (shown in the Found Yes No	nt servicing the building (as listed lation Type Diagrams at end of Se	in Item H2 instructions) elevent ection H instructions) for the a	ated to or above the floor indicated by the ppropriate Building Diagram?
SECTION I - PROPE	RTY OWNER (OR OWNER'S	AUTHORIZED REPRESE	NTATIVE) CERTIFICATION
The property owner or owner's auth A, B, and H are correct to the best indicate in Item G2.b and sign Sect	of my knowledge. Note: If the loc tion G.	al floodplain management off	ist sign here. <i>The statements in Sections</i> icial completed Section H, they should nent in the Comments area.
Property Owner or Owner's Author	ized Representative Name:		
	-		
Address:			
Address: City:		State:	ZIP Code:
	Ext.: Email:	State:	ZIP Code:
City:	Ext.: Email:	State:	ZIP Code:
City: Telephone:	Ext.: Email:		
City: Telephone: Signature:	Ext.: Email:	Date:	IVED Solution PLANG
City: Telephone: Signature:	Ext.: Email:	Date: RECE	EIVED CORD CONCERNING
City: Telephone: Signature:	Ext.: Email:	Date:	S 2024
City: Telephone: Signature:	Ext.: Email:	Date: RECE NOV 0 TOWN OF LO	S 2024
City: Telephone: Signature:	Ext.: Email:	Date: RECE NOV 0 TOWN OF LO	S 2024
City: Telephone: Signature:	Ext.: Email:	Date: RECE NOV 0 TOWN OF LO	S 2024

### ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11 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.:		FOR INSURANCE COMPANY USE
791 BINNACLE POINT DRIVE		- Policy Number:
	State: FL ZIP Code: 34228	Company NAIC Number:

Instructions: Insert below at least two and when possible four photographs showing each side of the building (for example, may only be able to take front and back pictures of townhouses/rowhouses). Identify all photographs with the date taken and "Front View," "Rear View," "Right Side View," or "Left Side View." Photographs must show the foundation. When flood openings are present, include at least one close-up photograph of representative flood openings or vents, as indicated in Sections A8 and A9.

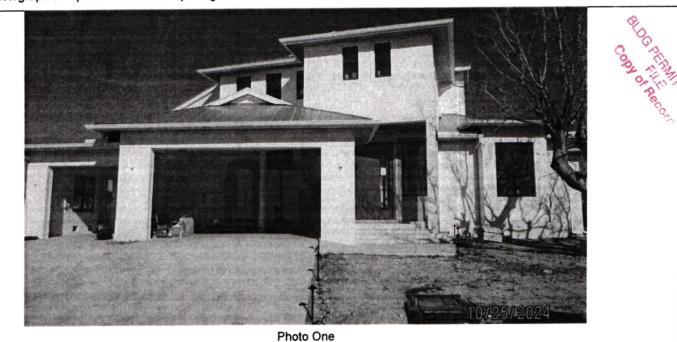


Photo One Caption: FRONT VIEW



Photo Two

Photo Two Caption: REAR VIEW

Clear Photo Two

Clear Photo One

Reg

### ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11 BUILDING PHOTOGRAPHS

**Continuation Page** 

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:		FOR INSURANCE COMPANY USE	
791 BINNACLE POINT DRIVE City: TOWN OF LONGBOAT KEY		ZIP Code: 34228	Policy Number:      Company NAIC Number:

Insert the third and fourth photographs below. Identify all photographs with the date taken and "Front View," "Rear View," "Right Side View," or "Left Side View." When flood openings are present, include at least one close-up photograph of representative flood openings or vents, as indicated in Sections A8 and A9.



Photo Three

Photo Three Caption: SIDE VIEW (SOUTHWESTERLY SIDE)

Photo Four Photo Four Ciear Photo Four

**Clear Photo Three** 



Most Widely Accepted and Trusted

# **ICC-ES Evaluation Report**

## ESR-2074

ICC-ES | (800) 423-6587 | (562) 699-0543 | www.icc-es.org

Reissued 02/2023 This report is subject to renewal 02/2025.

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



**REPORT HOLDER:** 

### SMART VENT PRODUCTS, INC.



EVALUATION SUBJECT:

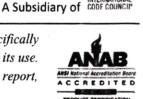
SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514 FLOOD VENT SEALING KIT #1540-526



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### ICC-ES Evaluation Report ESR-2074

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:

- 2021, 2018, 2015, 2012, 2009 and 2006 International Building Code<sup>®</sup> (IBC)
- 2021, 2018, 2015, 2012, 2009 and 2006 International Residential Code<sup>®</sup> (IRC)
- 2021 and 2018 International Energy Conservation Code<sup>®</sup> (IECC)
- 2013 Abu Dhabi International Building Code (ADIBC)<sup>†</sup>

 $^{\rm t}{\rm The}$  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<sup>®</sup> 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<sup>®</sup> 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

A Subsidiary of the International Code Council®

Reissued February 2023

This report is subject to renewal February 2025.

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<sup>®</sup> Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. The SmartVENT<sup>®</sup> Stacking Model #1540-511 and FloodVENT<sup>®</sup> 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<sup>®</sup> Model #1540-510 and SmartVENT<sup>®</sup> Overhead Door Model #1540-514 both have screen covers with <sup>1</sup>/<sub>4</sub>-inch-by-<sup>1</sup>/<sub>4</sub>-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm<sup>2</sup>) of net free area to supply natural ventilation. The SmartVENT<sup>®</sup> Stacking Model #1540-511 consists of two Model #1540-510 units in one assembly, and provides 102 square inches (65 806 mm<sup>2</sup>) of net free area to supply natural ventilation. Other FVs described 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<sup>®</sup> Model #1540-520. It is a Homasote 440 Sound Barrier<sup>®</sup> (ESR-1374) insert with 21 - 2-inch-by-2-inch (51 mm x 51 mm) squares cut in it. See Figure 4.

### 4.0 DESIGN AND INSTALLATION

### 4.1 SmartVENT<sup>®</sup> and FloodVENT<sup>®</sup>:

SmartVENT<sup>®</sup> and FloodVENT<sup>®</sup> 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<sup>®</sup> FVs must be installed as follows:

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- 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 m<sup>2</sup>) of enclosed area, except that the SmartVENT<sup>®</sup> Stacking Model #1540-511 and FloodVENT<sup>®</sup> Stacking Model #1540-521 must be installed with a minimum of one FV for every 400 square feet (37.2 m<sup>2</sup>) 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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 February 2021).
- Test report on air infiltration in accordance with ASTM E283.

### 7.0 IDENTIFICATION

- 7.1 The Smart VENT<sup>®</sup> models and the Flood Vent Sealing Kit described 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. 19 MANTUA ROAD MOUNT ROYAL, NEW JERSEY 08061 (877) 441-8368 www.smartvent.com info@smartvent.com

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT <sup>®</sup>	1540-520	15 <sup>3</sup> /4" X 7 <sup>3</sup> /4"	200
SmartVENT®	1540-510	15 <sup>3</sup> /4" X 7 <sup>3</sup> /4"	200
FloodVENT <sup>®</sup> Overhead Door	1540-524	15 <sup>3</sup> /4" X 7 <sup>3</sup> /4"	200
SmartVENT <sup>®</sup> Overhead Door	1540-514	15 <sup>3</sup> /4" X 7 <sup>3</sup> /4"	200
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
Wood Wall FloodVENT <sup>®</sup> Overhead Door	1540-574	14" X 8 <sup>3</sup> / <sub>4</sub> "	200
SmartVENT <sup>®</sup> Stacker	1540-511	16" X 16"	400
FloodVent <sup>®</sup> Stacker	1540-521	16" X 16"	400

TABLE 1-MODEL SIZES

For SI: 1 inch = 25.4 mm; 1 square foot = m<sup>2</sup>

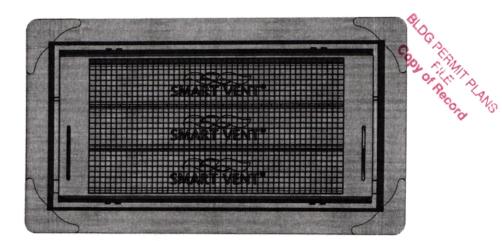


FIGURE 1-SMART VENT: MODEL 1540-510

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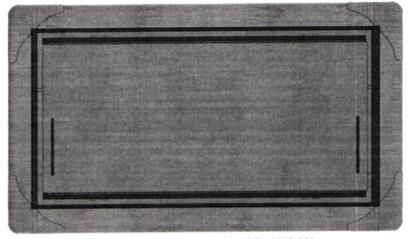


FIGURE 2-SMART VENT MODEL 1540-520

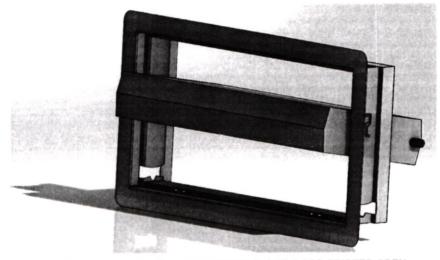


FIGURE 3-SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN

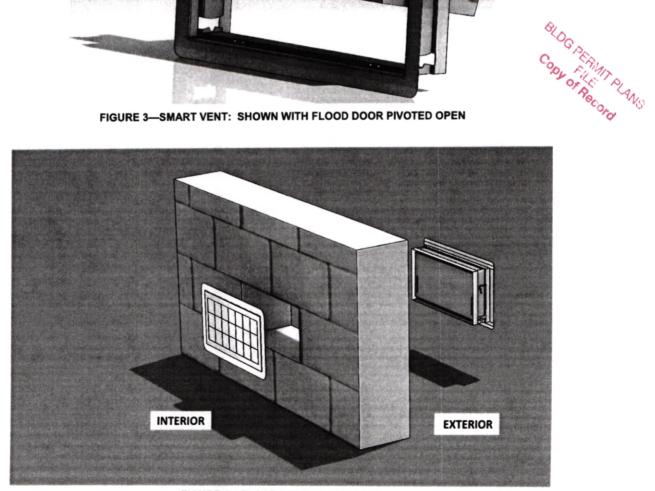


FIGURE 4—FLOOD VENT SEALING KIT



### **ICC-ES Evaluation Report**

### ESR-2074 CBC and CRC Supplement

Reissued February 2023 This report is subject to renewal February 2025.

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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<sup>®</sup> 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 REPORT PURPOSE AND SCOPE

### Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, described in ICC-ES evaluation report ESR-2074, have also been evaluated for compliance with codes noted below.

### Applicable code editions:

### ■ 2019 California Building Code (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

■ 2019 California Residential Code (CRC)

### 2.0 CONCLUSIONS

### 2.1 CBC:

The Smart Vent<sup>®</sup> Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with 2019 CBC Chapter 12, provided the design and installation are in accordance with the 2018 *International Building Code*<sup>®</sup> (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 12 and 16, as applicable.

### 2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

### 2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

### 2.2 CRC:

The Smart Vent<sup>®</sup> Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with the 2019 CRC, provided the design and installation are in accordance with the 2018 *International Residential Code*<sup>®</sup> (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued February 2023.



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### **ICC-ES Evaluation Report**

### ESR-2074 FBC Supplement

Reissued February 2023 This report is subject to renewal February 2025.

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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 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, described in ICC-ES evaluation report ESR-2074, have also been evaluated for compliance with the codes noted below.

### Applicable code editions:

- 2020 Florida Building Code—Building
- 2020 Florida Building Code—Residential

#### 2.0 CONCLUSIONS

The Smart Vent<sup>®</sup> Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, provided the design requirements are determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-2074 for 2018 *International Building Code*<sup>®</sup> meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code*.

Use of the Smart Vent<sup>®</sup> 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 61G20-3, 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 evaluation report, reissued February 2023.

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