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 CERTIFICATEIMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

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

| SECTION A – PROPERTY INFORMATION | FOR INSURANCE COMPANY USE |
|---|---------------------------------|
| A1. Building Owner's Name: GREAT SOUTHERN HOMES | Policy Number: |
| A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: | Company NAIC Number: |
| 453 HONEYHILL LOOP | |
| City: CONWAY State: SC | ZIP Code: 29526 |
| A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel NuLOT 88 GRISSETT LAKE LANDING, PIN# 340-03-04-0053 | mber: |
| A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): RESIDENTIAL | |
| A5. Latitude/Longitude: Lat. 33°51'34.90"N Long78°59'42.33" W Horizontal Datum: | NAD 1927 🛛 NAD 1983 🗌 WGS 84 |
| A6. Attach at least two and when possible four clear photographs (one for each side) of the building | g (see Form pages 7 and 8). |
| A7. Building Diagram Number:1B | |
| A8. For a building with a crawlspace or enclosure(s): | |
| a) Square footage of crawlspace or enclosure(s): N/A sq. ft. | |
| b) Is there at least one permanent flood opening on two different sides of each enclosed area? | Yes No X N/A |
| c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot Non-engineered flood openings: N/A Engineered flood openings: N/A | 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 | ons): N/A 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: 435 sq. ft. | |
| b) Is there at least one permanent flood opening on two different sides of the attached garage | ? 🛛 Yes 🗌 No 🔲 N/A |
| c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adjacent Non-engineered flood openings: <u>*2</u> Engineered flood openings: <u>*1</u> | acent grade: |
| d) Total net open area of non-engineered flood openings in A9.c: *40.6 sq. in. | |
| e) Total rated area of engineered flood openings in A9.c (attach documentation - see Instruction | ons): <u>*200</u> sq. ft. |
| f) Sum of A9.d and A9.e rated area (if applicable – see Instructions):*240.6 sq. ft. | |
| SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFO | RMATION |
| B1.a. NFIP Community Name: HORRY COUNTY B1.b. NFIP Community Ide | entification Number: 450104 |
| B2. County Name: HORRY B3. State: SC B4. Map/Panel No.: | 45051C0555 B5. Suffix: <u>K</u> |
| B6. FIRM Index Date: 12/16/2021 B7. FIRM Panel Effective/Revised Date: 12/16/2 | 021 |
| B8. Flood Zone(s): _*X B9. Base Flood Elevation(s) (BFE) (Zone AO, use | Base Flood Depth): *N/A |
| B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9: ☐ FIS ☐ FIRM ☐ Community Determined ☒ Other: SEE COMMENTS | |
| B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 X NAVD 1988 Othe | r/Source: |
| B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Pro- Designation Date: CBRS OPA | tected Area (OPA)? Yes X No |
| B13. Is the building located seaward of the Limit of Moderate Wave Action (LiMWA)? Yes X | No |

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

| Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Building Apt., Unit, Suite, and/or Bldg. No.) | ox No.: | FOR INSURANCE COMPANY USE |
|--|-----------------------------|---|
| 453 HONEYHILL LOOP City: CONWAY State: SC ZIP Code: 295. | Policy Number: | |
| | | Company NAIC Number: |
| SECTION C – BUILDING ELEVATION INFORMATION | N (SURVEY F | REQUIRED) |
| C1. Building elevations are based on: Construction Drawings* Building Ur *A new Elevation Certificate will be required when construction of the building is construction. | nder Construction | on* X Finished Construction |
| C2. Elevations – Zones A1–A30, AE, AH, AO, A (with BFE), VE, V1–V30, V (with BFE A99. Complete Items C2.a–h below according to the Building Diagram specified in Benchmark Utilized: SC VRS OBSERVATION Vertical Datum: I | n Item A7. In Pi | |
| Indicate elevation datum used for the elevations in items a) through h) below. NGVD 1929 X NAVD 1988 Other: | | |
| Datum used for building elevations must be the same as that used for the BFE. Conve If Yes, describe the source of the conversion factor in the Section D Comments area. | rsion factor use | ed? Yes X No Check the measurement used: |
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor): | 19.6 | X feet meters |
| b) Top of the next higher floor (see Instructions): | N/A | X feet meters |
| c) Bottom of the lowest horizontal structural member (see Instructions): | N/A | X feet meters |
| d) Attached garage (top of slab): | 18.3 | X feet meters |
| e) Lowest elevation of Machinery and Equipment (M&E) servicing the building (describe type of M&E and location in Section D Comments area): | *19.2 | X feet meters |
| f) Lowest Adjacent Grade (LAG) next to building: Natural X Finished | 17.2 | X feet meters |
| g) Highest Adjacent Grade (HAG) next to building: Natural X Finished | 17.6 | X feet meters |
| Finished LAG at lowest elevation of attached deck or stairs, including structura support: | .l N/A | X feet _ meters |
| SECTION D – SURVEYOR, ENGINEER, OR ARCHI | TECT CERTI | FICATION |
| This certification is to be signed and sealed by a land surveyor, engineer, or architect information. I certify that the information on this Certificate represents my best efforts to false statement may be punishable by fine or imprisonment under 18 U.S. Code, Sect Were latitude and longitude in Section A provided by a licensed land surveyor? | to interpret the tion 1001. | |
| Certifier's Name: WALTER B. SHEETS License Number: L-269 | 959 | _ |
| Title: LAND SURVEYOR | | CARO WILL |
| Company Name: RLA ASSOCIATES, PA | | LILO BOKESSION TO |
| Address: 14323 OCEAN HIGHWAY, STE 4139 | | |
| City: PAWLEYS ISLAND State: SC ZIP Code: | 29585 | CAROLINITH CAROLINIA |
| Signature: | 2/01/2023 | SURVE B. SHELLING |
| Telephone: 843-879-9091 Ext.: 405 Email: BRAD@RLAPLS.COM | | |
| Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2 | | |
| Commants (including source of conversion factor in C2: type of equipment and leastic | n nor CO at an | d description of any attachments): |

Comments (including source of conversion factor in C2; type of equipment and location per C2.e; and description of any attachments): *SMART VENT ESR ATTACHED.

*A9. c-f). ONE SMART VENT MODEL#1540-520 CERTIFIED TO COVER 200 SQ.FT. AND TWO NON-ENGINNEERED FLOOD VENTS PROVIDING 40.6 SQ.IN. OF FLOOD OPENING INSTALLED FOR A TOTAL NET AREA OF240.6 SQ.IN OF FLOOD OPENING.

*B8, B9 & B10. STRUCTURE AND LOT APPEAR TO BE LOCATED IN FLOOD ZONE X PER FEMA LOMR CASE No. 22-04-2329A DATED 06/08/2022. PER HORRY COUNTY GIS MAP, STRUCTURE AND LOT APPEAR TO LIE IN AN HORRY COUNTY SUPPLEMENTAL FLOOD ZONE WITH A BFE OF 17.0'.

*C2. e) HVAC UNIT. ELEVATION SHOT ON TOP OF HVAC RISER.

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

| Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Rou | te and Box No.: | FOR INSURANCE COMPANY USE | | | | |
|--|--|---|--|--|--|--|
| 453 HONEYHILL LOOP City: CONWAY State: SC ZIP Coo | le: 29526 | Policy Number: | | | | |
| City. CONVAT | e. <u>29320</u> | Company NAIC Number: | | | | |
| SECTION E – BUILDING MEASUREMENT INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO, ZONE AR/AO, AND ZONE A (WITHOUT BFE) | | | | | | |
| For Zones AO, AR/AO, and A (without BFE), complete Items E1–E5. For Item intended to support a Letter of Map Change request, complete Sections A, B, enter meters. | | | | | | |
| | Building measurements are based on: Construction Drawings* Building Under Construction* Finished Construction *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 followassurement is above or below the natural HAG and the LAG. | owing and check the a | ppropriate boxes to show whether the | | | | |
| 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 Senext higher floor (C2.b in applicable Building Diagram) of the building is: | ection A Items 8 and/or | r 9 (see pages 1–2 of Instructions), the 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 bott floodplain management ordinance? Yes No Unknown | | ccordance with the community's ust certify this information in Section G. | | | | |
| SECTION F – PROPERTY OWNER (OR OWNER'S AUTHO | RIZED REPRESEN | TATIVE) CERTIFICATION | | | | |
| The property owner or owner's authorized representative who completes Sec sign here. The statements in Sections A, B, and E are correct to the best of n | | 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: | O | 710.0 | | | | |
| City: | State: | ZIP Code: | | | | |
| Signature: | Date: | | | | | |
| Telephone: Ext.: Email: | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
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| | | | | | | |
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IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

| Building Street Address (including Apt., Unit, Suite, a | and/or Bldg. No.) o | or P.O. Route and | Box No.: | FOR INS | URANCE COMPANY USE |
|---|---------------------|--------------------------|-------------------|----------------|-------------------------------|
| 453 HONEYHILL LOOP | 0 | 710.0 1 0 | 2500 | Policy Nur | mber: |
| City: CONWAY | State: SC | _ ZIP Code: _2 | 9526 | Company | NAIC Number: |
| SECTION G - COMMUNITY INFORMA | ATION (RECO | MMENDED FO | R COMMUNI | TY OFFICIA | L COMPLETION) |
| The local official who is authorized by law or ordina Section A, B, C, E, G, or H of this Elevation Certification | | | | | dinance can complete |
| G1. The information in Section C was taken engineer, or architect who is authorize elevation data in the Comments area by | d by state law to | | | | |
| G2.a. A local official completed Section E for E5 is completed for a building located | | ed in Zone A (with | out a BFE), Zo | one AO, or Zo | ne AR/AO, or when item |
| G2.b. | insurance purpo | ses. | | | |
| G3. | e local official de | scribes specific o | corrections to th | he information | in Sections A, B, E and H. |
| G4. | 311) is provided f | or community floo | odplain manag | ement purpos | es. |
| G5. Permit Number: 165460 | G6. Date F | Permit Issued: | 06/22/2023 | | |
| G7. Date Certificate of Compliance/Occupancy | Issued: | | | | |
| G8. This permit has been issued for: New | Construction | Substantial Imp | provement | | |
| G9.a. Elevation of as-built lowest floor (including building: | basement) of the | | feet | meters | Datum: |
| G9.b. Elevation of bottom of as-built lowest horizmember: | ontal structural | | | meters | Datum: |
| G10.a. BFE (or depth in Zone AO) of flooding at the | ne building site: | | leet | meters | Datum: |
| G10.b. Community's minimum elevation (or depth requirement for the lowest floor or lowest hember: | | al | ☐ feet | ☐ meters | Datum: |
| G11. Variance issued? ☐ Yes 🔀 No If y | es, attach docum | entation and des | | | |
| The local official who provides information in Secti correct to the best of my knowledge. If applicable, | on G must sign h | nere. <i>I have comp</i> | leted the infori | mation in Sec | tion G and certify that it is |
| Local Official's Name: Lauren Harrelson, CF | M | Title: | Flood Haz | ard Reduct | ion Control Officer |
| NFIP Community Name: | | | | | |
| | | | | | |
| Address: | | | | | |
| City: | | | | ZIP C | ode: |
| Signature: Lauren Harrelson | | Date: | 12/08/2023 | | |
| Comments (including type of equipment and location Sections A, B, D, E, or H): | on, per C2.e; des | scription of any a | tachments; an | d corrections | to specific information in |
| B10 should be FIRM. C2 datum N | AVD 1988. | | | | |

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

| Building Street Address (including Ap 453 HONEYHILL LOOP | t., Unit, Suite, a | nd/or Bldg. No.) or P. | O. Route and Box | No.: | FOR INS | SURANCE COMPANY USE |
|---|------------------------------------|--|---------------------------------------|-----------------------------|-------------------------------|---|
| City: CONWAY | | State: SC Z | IP Code: 29526 | 6 | Policy Nu | umber: |
| | | | | | Company | / NAIC Number: |
| | | S FIRST FLOOR H EQUIRED) (FOR I | | | | ONES |
| The property owner, owner's author to determine the building's first floor nearest tenth of a foot (nearest tenth <i>Instructions</i>) and the appropriate | height for insu h of a meter in | rance purposes. Sec Puerto Rico). Refere | ctions A, B, and I ence the Founda | must also b ation Type I | e complete Diagrams | ed. Enter heights to the (at the end of Section H |
| H1. Provide the height of the top of | the floor (as in | dicated in Foundatio | n Type Diagrams | above the | Lowest Ad | jacent Grade (LAG): |
| a) For Building Diagrams 1A floor (include above-grade floor subgrade crawlspaces or enclo | s only for build | | | feet [| meters | above the LAG |
| b) For Building Diagrams 2A higher floor (i.e., the floor above enclosure floor) is: | | | | feet | meters | above the LAG |
| H2. Is all Machinery and Equipmen H2 arrow (shown in the Founda Yes No | | | | | | |
| SECTION I – PROPER | TY OWNER (| OR OWNER'S AL | JTHORIZED RI | EPRESENT | TATIVE) (| CERTIFICATION |
| The property owner or owner's authors, <i>A, B, and H are correct to the best of</i> indicate in Item G2.b and sign Section | of my knowledg | | | | | |
| Check here if attachments are pr | | | | | | |
| Officer field if attachments are pr | rovidea (includi | ng required photos) | and describe ead | ch attachme | nt in the Co | omments area. |
| Property Owner or Owner's Authoriz | · | | and describe ead | ch attachme | nt in the Co | omments area. |
| | · | | and describe ead | ch attachme | nt in the Co | omments area. |
| Property Owner or Owner's Authoriz Address: | red Representa | | | State: | | omments area. Code: |
| Property Owner or Owner's Authoriz Address: City: | red Representa | ative Name: | | | | |
| Property Owner or Owner's Authoriz Address: City: Signature: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | red Representa | ative Name: | | | | |
| Property Owner or Owner's Authoriz Address: City: Signature: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | zed Representa | ative Name: | | | | |
| Property Owner or Owner's Authorized Address: City: Signature: Telephone: | zed Representa | ative Name: | | | | |

ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19 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 |
|--|-----------|-----------|-------|--------------------------------------|
| 453 HONEYHILL LOOP City: CONWAY | State: SC | ZIP Code: | 29526 | Policy Number: 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 LEFT VIEW 12/01/2023

Clear Photo One



Photo Two Caption: FRONT RIGHT VIEW 12/01/2023

Clear Photo Two

ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19 BUILDING PHOTOGRAPHS

Continuation Page

| Building Street Address (including Apt | FOR INSURANCE COMPANY USE | | | |
|--|---------------------------|-----------|-------|--------------------------------------|
| 453 HONEYHILL LOOP City: CONWAY | State: SC | ZIP Code: | 29526 | 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 Caption: REAR RIGHT VIEW 12/01/2023

Clear Photo Three



Photo Four Caption: REAR LEFT VIEW 12/01/2023

Clear Photo Four



ENGINEERED FLOOD VENT IN SIDE OF GARAGE FOUNDATION



ENGINEERED FLOOD VENT MODEL NUMBER



NON-ENGINEERED FLOOD VENTS IN GARAGE DOOR



BACK OF NON-ENGINEERED FLOOD VENT





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ESR-2074

Reissued 02/2021 Revised 04/2021 This report is subject to renewal 02/2023.

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"



this

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ESR-2074

Reissued February 2021 Revised April 2021 This report is subject to renewal February 2023.

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:

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[®] (IBC)
- 2021, 2018, 2015, 2012, 2009 and 2006 International Residential Code[®] (IRC)
- 2021, 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 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® Model #1540-520. It is a Homasote 440 Sound Barrier® (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® 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 February 2021).
- **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 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. 430 ANDBRO DRIVE, UNIT 1 PITMAN, NEW JERSEY 08071 (877) 441-8368

www.smartvent.com info@smartvent.com

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 = m^2

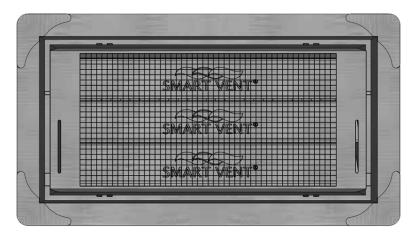


FIGURE 1—SMART VENT: MODEL 1540-510

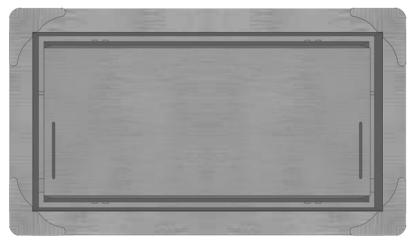


FIGURE 2—SMART VENT MODEL 1540-520



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

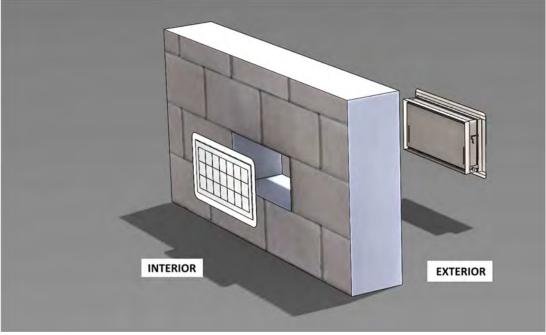


FIGURE 4—FLOOD VENT SEALING KIT



ESR-2074 CBC and CRC Supplement

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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; #1540-524; #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) and 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® 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*® (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® 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*® (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued February 2021 and revised April 2021.





ESR-2074 FBC Supplement

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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® 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®* meet the requirements of the *Florida Building Code-Building* or the *Florida Building Code-Residential*, as applicable.

Use of the Smart Vent® Automatic Foundation Flood Vents has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the *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 2021 and revised April 2021.

