

ELEVATION CERTIFICATE

Important: 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.

| SECTION A – PROPERTY INFORMATION  |                 |                                   |  |                                    | FOR INSURANCE COMPANY USE  |  |
|---|-----------------|-----------------------------------|--|------------------------------------|--|--|
| A1. Building Owner's Name<br>J M Edwards  |                 |                                   |  |                                    | Policy Number:   |  |
| A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.<br>5109 Pitch Landing Drive   |                 |                                   |  |                                    | Company NAIC Number:   |  |
| City<br>Conway  |                 | State<br>South Carolina           |  | ZIP Code<br>29527                  |  |  |
| A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)<br>TMS: 150-18-01-009 PIN: 381-05-04-0010 Pitch Landing Lot 9 Block A  |                 |                                   |  |                                    |  |  |
| A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) residential  |                 |                                   |  |                                    |  |  |
| A5. Latitude/Longitude: Lat. N 33° 47' 51.09" Long. W 79° 3' 15.83" Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983  |                 |                                   |  |                                    |  |  |
| A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.   |                 |                                   |  |                                    |  |  |
| A7. Building Diagram Number 6   |                 |                                   |  |                                    |  |  |
| A8. For a building with a crawlspace or enclosure(s):   |                 |                                   |  |                                    |  |  |
| a) Square footage of crawlspace or enclosure(s) 128.00 sq ft  |                 |                                   |  |                                    |  |  |
| b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 2  |                 |                                   |  |                                    |  |  |
| c) Total net area of flood openings in A8.b 400.00 sq in  |                 |                                   |  |                                    |  |  |
| d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No   |                 |                                   |  |                                    |  |  |
| A9. For a building with an attached garage:   |                 |                                   |  |                                    |  |  |
| a) Square footage of attached garage N/A sq ft  |                 |                                   |  |                                    |  |  |
| b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade N/A   |                 |                                   |  |                                    |  |  |
| c) Total net area of flood openings in A9.b N/A sq in   |                 |                                   |  |                                    |  |  |
| d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   |                 |                                   |  |                                    |  |  |
| SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION   |                 |                                   |  |                                    |  |  |
| B1. NFIP Community Name & Community Number<br>Horry County 450104   |                 |                                   | B2. County Name<br>Horry County                      |                                    | B3. State<br>South Carolina                                      |  |
| B4. Map/Panel Number<br>45051C 0516   | B5. Suffix<br>H | B6. FIRM Index Date<br>09-17-2003 | B7. FIRM Panel Effective/ Revised Date<br>08-23-1999 | B8. Flood Zone(s)<br>AE / Floodway | B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)<br>9 |  |
| B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:<br><input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____ |                 |                                   |  |                                    |  |  |
| B11. Indicate elevation datum used for BFE in Item B9: <input checked="" type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____  |                 |                                   |  |                                    |  |  |
| B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA         |                 |                                   |  |                                    |  |  |



# ELEVATION CERTIFICATE

OMB No. 1660-0008  
Expiration Date: November 30, 2022

|   |                         |                   |                                  |
|---|-------------------------|-------------------|----------------------------------|
| <b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>   |                         |                   | <b>FOR INSURANCE COMPANY USE</b> |
| Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.<br>5109 Pitch Landing Drive |                         |                   | Policy Number:                   |
| City<br>Conway  | State<br>South Carolina | ZIP Code<br>29527 | Company NAIC Number              |


## SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

- C1. Building elevations are based on: ☐ Construction Drawings\* ☐ Building Under Construction\* ☒ Finished Construction  
\*A new Elevation Certificate will be required when construction of the building is complete.
- C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.  
Benchmark Utilized: GPS on Real-time Network Vertical Datum: NGVD29
- Indicate elevation datum used for the elevations in items a) through h) below.  
☒ NGVD 1929 ☐ NAVD 1988 ☐ Other/Source: \_\_\_\_\_
- Datum used for building elevations must be the same as that used for the BFE.
- Check the measurement used.
- |   |      |  |                                 |
|---|------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)   | 7.4  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor   | 18.0 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)   | N/A  | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)  | N/A  | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building<br>(Describe type of equipment and location in Comments) | 17.2 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)  | 6.9  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)   | 7.2  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                                  | 6.9  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |

## 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.

Were latitude and longitude in Section A provided by a licensed land surveyor? ☒ Yes ☐ No ☐ Check here if attachments.

|  |                         |                         |   |
|--|-------------------------|-------------------------|---|
| Certifier's Name<br>Kenneth D. Jordan    |                         | License Number<br>21936 | <div style="text-align: center;"> <p>Place<br/>Seal<br/>Here</p>  </div> |
| Title<br>President                       |                         |                         |   |
| Company Name<br>K & R Land Surveyors Inc |                         |                         |   |
| Address<br>312 Laurel Street             |                         |                         |   |
| City<br>Conway                           | State<br>South Carolina | ZIP Code<br>29526       |   |

Signature  Date 01-29-2021 Telephone (843) 488-1804 Ext.

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

Comments (including type of equipment and location, per C2(e), if applicable)  
Elevations were determined using Real-Time Network GPS and converted to NGVD29 Datum using NGS software  
  
Lowest piece of machinery is the A/C unit  
  
Enclosure contains an enclosed elevator with no flood vents



|   |                         |                   |                           |  |
|---|-------------------------|-------------------|---------------------------|--|
| 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.<br>5109 Pitch Landing Drive |                         |                   | Policy Number:            |  |
| City<br>Conway  | State<br>South Carolina | ZIP Code<br>29527 | Company NAIC Number       |  |

SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED)  
FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).

a) Top of bottom floor (including basement, crawlspace, or enclosure) is

☐ feet ☐ meters ☐ above or ☐ below the HAG.

b) Top of bottom floor (including basement, crawlspace, or enclosure) is

☐ feet ☐ meters ☐ above or ☐ below the LAG.

E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 1–2 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is

☐ feet ☐ meters ☐ above or ☐ below the HAG.

E3. Attached garage (top of slab) is

☐ feet ☐ meters ☐ above or ☐ below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is

☐ feet ☐ meters ☐ above or ☐ below the HAG.

E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? ☐ Yes ☐ No ☐ Unknown. The local official must certify this information in Section G.

SECTION F – PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.

Property Owner or Owner's Authorized Representative's Name

Address

City

State

ZIP Code

Signature

Date

Telephone

Comments

☐ Check here if attachments.

|   |                         |                   |                           |  |
|---|-------------------------|-------------------|---------------------------|--|
| 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.<br>5109 Pitch Landing Drive |                         |                   | Policy Number:            |  |
| City<br>Conway  | State<br>South Carolina | ZIP Code<br>29527 | Company NAIC Number       |  |

SECTION G – COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8–G10. In Puerto Rico only, enter meters.

- G1. ☐ The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)
- G2. ☐ A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3. ☐ The following information (Items G4–G10) is provided for community floodplain management purposes.

|                   |                        |   |
|-------------------|------------------------|---|
| G4. Permit Number | G5. Date Permit Issued | G6. Date Certificate of Compliance/Occupancy Issued |
|-------------------|------------------------|---|

- G7. This permit has been issued for: ☐ New Construction ☐ Substantial Improvement
- G8. Elevation of as-built lowest floor (including basement) of the building: \_\_\_\_\_ ☐ feet ☐ meters Datum \_\_\_\_\_
- G9. BFE or (in Zone AO) depth of flooding at the building site: \_\_\_\_\_ ☐ feet ☐ meters Datum \_\_\_\_\_
- G10. Community's design flood elevation: \_\_\_\_\_ ☐ feet ☐ meters Datum \_\_\_\_\_

|                       |       |
|-----------------------|-------|
| Local Official's Name | Title |
|-----------------------|-------|

|                |           |
|----------------|-----------|
| Community Name | Telephone |
|----------------|-----------|

|           |      |
|-----------|------|
| Signature | Date |
|-----------|------|

Comments (including type of equipment and location, per C2(e), if applicable)

☐ Check here if attachments.



|   |                         |                   |                           |  |
|---|-------------------------|-------------------|---------------------------|--|
| 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.<br>5109 Pitch Landing Drive |                         |                   | Policy Number:            |  |
| City<br>Conway  | State<br>South Carolina | ZIP Code<br>29527 | Company NAIC Number       |  |

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 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." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.



Photo One

Photo One Caption

Front

Clear Photo One



Photo Two

Photo Two Caption

Rear

Clear Photo Two



|   |                         |                   |                           |
|---|-------------------------|-------------------|---------------------------|
| 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.<br>5109 Pitch Landing Drive |                         |                   | Policy Number:            |
| City<br>Conway  | State<br>South Carolina | ZIP Code<br>29527 | Company NAIC Number       |

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.



Photo Three

|                     |       |                   |
|---------------------|-------|-------------------|
| Photo Three Caption | Right | Clear Photo Three |
|---------------------|-------|-------------------|



Photo Four

|                    |      |                  |
|--------------------|------|------------------|
| Photo Four Caption | Left | Clear Photo Four |
|--------------------|------|------------------|





92096



ICC  
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## ICC-ES Evaluation Report

ICC-ES | (800) 423-6587 | (562) 699-0543 | [www.icc-es.org](http://www.icc-es.org)

**ESR-2074**

Reissued 02/2019

This report is subject to renewal 02/2021.

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"*



A Subsidiary of

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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 October 2017).
- 6.2 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 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](http://www.smartvent.com)  
[info@smartvent.com](mailto:info@smartvent.com)

TABLE 1—MODEL SIZES

| MODEL NAME                                     | MODEL NUMBER | MODEL SIZE (in.)   | COVERAGE (sq. ft.) |
|--|--------------|--|--------------------|
| FloodVENT <sup>®</sup>                         | 1540-520     | 15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> " | 200                |
| SmartVENT <sup>®</sup>                         | 1540-510     | 15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> " | 200                |
| FloodVENT <sup>®</sup> Overhead Door           | 1540-524     | 15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> " | 200                |
| SmartVENT <sup>®</sup> Overhead Door           | 1540-514     | 15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> " | 200                |
| Wood Wall FloodVENT <sup>®</sup>               | 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                |

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

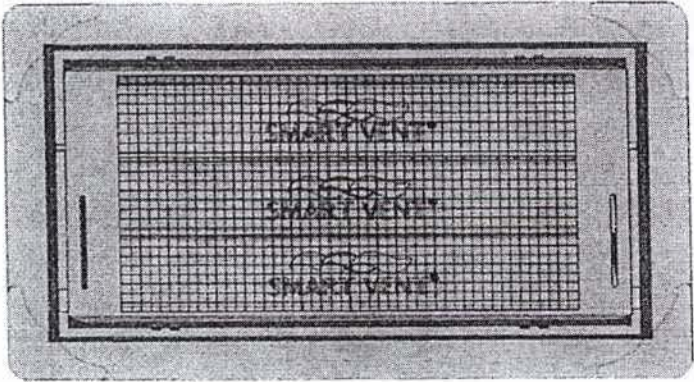


FIGURE 1—SMART VENT: MODEL 1540-510

## ICC-ES Evaluation Report

## ESR-2074 CBC and CRC Supplement

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 REPORT PURPOSE AND SCOPE

## Purpose:

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

## Applicable code edition:

- 2016 California Building Code (CBC)
- 2016 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 master evaluation report ESR-2074, comply with 2016 CBC Chapter 12, provided the design and installation are in accordance with the 2015 *International Building Code*® (IBC) provisions noted in the master report and the additional requirements of CBC Chapters 12, 16 and 16A, as applicable.

The products recognized in this supplement have not been evaluated under CBC Chapter 7A for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area.

## 2.2 CRC:

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2074, comply with the 2016 CRC, provided the design and installation are in accordance with the 2015 *International Residential Code*® (IRC) provisions noted in the master report.

The products recognized in this supplement have not been evaluated under 2016 CRC Chapter R337, for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area.

The products recognized in this supplement have not been evaluated for compliance with the International Wildland-Urban Interface Code®.

This supplement expires concurrently with the master report, reissued February 2019.

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

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## INSULATED SERIES

This series of vents is ideal for areas requiring flood venting protection but no natural air ventilation.

The flood door contains a 2" insulated core that has an R-value of 8.34 and the vent frame is lined with felt weather stripping, helping to keep the enclosure as insulated from the elements as possible.

### IDEAL FOR:

- Garages
- Full height enclosures (e.g. walkouts)
- Conditioned crawlspaces
- Storage facilities
- Metal buildings
- Foyers

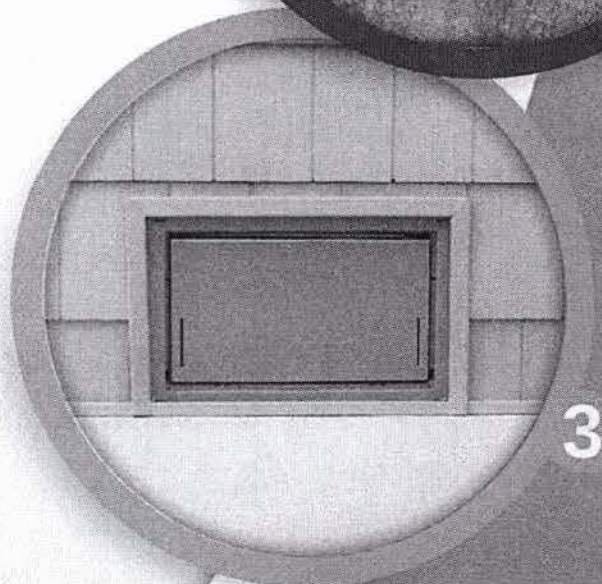
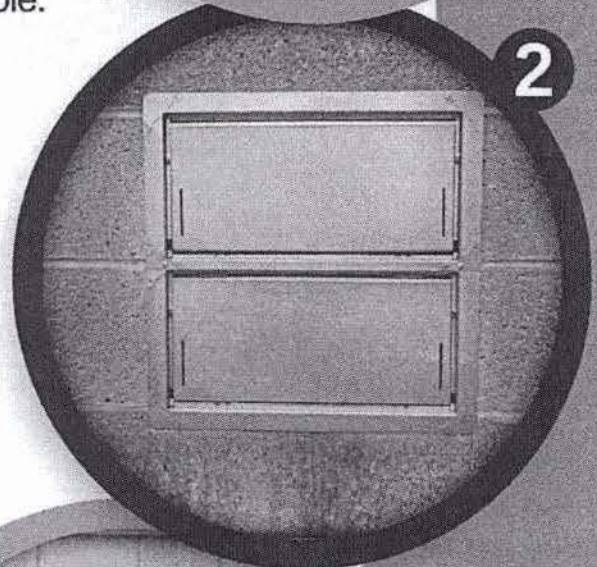
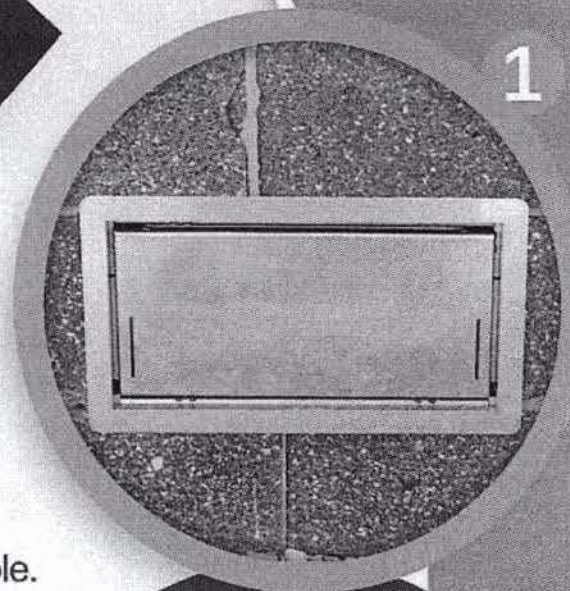
### 1 Flood Vent 1540-520

### 2 Stacker 1540-521

Stacker Models are twice as efficient as a single unit and are a great solution for large amounts of square footage, and in situations where there is not enough wall space to fit in single units.

### 3 Wood Wall 1540-570

Wood Wall Models are designed to fit between studs spaced at 16" on center. Pre-drilled slots in the four corners on the vent flange make for an easy installation.



*Pictured in  
powder coat  
paint gray*

**For more information on Flood Protection Solutions, contact:**

Smart Vent 430 Andbro Drive, Unit 1 • Pitman, NJ 08071

Website: [www.smartvent.com](http://www.smartvent.com) Tel: (877) 441-8368 Email: [info@smartvent.com](mailto:info@smartvent.com)





Smart VENT

877- 441- 8368

www.smartvent.com

INSTALLATION INSTRUCTIONS  
& DETAILS  
MODEL 1540-570  
14.5" WOOD WALL INSULATED  
REV. 6-21-16

INSTALLATION INSTRUCTIONS

(SEE DIAGRAM ON BACK PAGE 1 OF 2)

1. FOR EACH VENT CUT A CLEAN, SQUARE, AND LEVEL 14 1/2" X 8 3/4" OPENING IN THE OUTSIDE SHEATHING. ENSURE THAT THE BOTTOM OF THE OPENING IS NO MORE THAN 12" ABOVE THE OUTSIDE FINAL GRADE.
2. REMOVE VENT DOOR FROM VENT FRAME. (TURN UPSIDE DOWN, ROTATE BOTTOM OF DOOR OUTWARD AND SLIDE OUT OF FRAME SLOTS)
3. POSITION THE VENT FRAME IN THE OPENING WITH SERIAL NUMBER LABEL ON THE BOTTOM AND ENSURE THAT IT IS SQUARE AND LEVEL. APPLY A SMALL BEAD OF HURRIBOND GRIP & SEAL OR EQUIVALENT ADHESIVE BEHIND THE VENT FRONT FRAME AS SHOWN IN THE DIAGRAM.
4. USE 4 EACH FLATHEAD STAINLESS STEEL SCREWS TO SECURE THE FRAME THROUGH THE SHEATHING AND INTO THE STRUCTURAL MEMBER.  
NOTE: THIS MODEL DOES NOT CONTAIN STRAPS.
5. INSTALL THE DOOR BY INSERTING THE SIDE PINS INTO THE TRACKS AT THE SIDES OF THE VENT FRAME. ENSURE THE BLACK FLOAT PINS ARE FACING DOWNWARD.
6. LET THE BOTTOM OF THE VENT DOOR GO SO THAT IT ROTATES DOWN INTO THE VENT FRAME. CHECK THAT VENT DOOR IS LATCHED ON BOTH SIDES.
7. TO OPEN THE DOOR INSERT 2 CREDIT CARDS INTO THE FLOAT SLOTS AS SHOWN IN THE DIAGRAM.
8. THE OUTSIDE FLANGE AND SCREWS CAN BE COVERED WITH "J" CHANNEL OR ANY SURFACE TREATMENT LIKE BRICK OR STONE. USE CAUTION DO NOT APPLY ANY COVERING THAT WILL IMPEDE THE MOVEMENT OF THE VENT DOOR IN ANY DIRECTION.

DETAIL SPECIFICATIONS:

MATERIAL: STAINLESS STEEL

OPERATION: AUTOMATIC NON-POWERED ACTIVATION AND OPERATION  
VENT REMAINS CLOSED AND LOCKED UNTIL ACTIVATED

INSTALLATION:

SECURED W/ 4 STAINLESS STEEL FLATHEAD SCREWS

NOTE: THIS MODEL DOES NOT CONTAIN STRAPS

HYDROSTATIC RELIEF: 200 SQ. FT PER VENT

REQUIREMENTS: MINIMUM OF 2 VENTS PER ENCLOSED AREA  
MOUNTED ON OPPOSITE OR ADJACENT WALLS

COLORS: STAINLESS STEEL (STANDARD)  
WHITE, WHEAT, GRAY, AND BLACK (AVAILABLE)

MEETS THE REQUIREMENTS FOR ENGINEERED OPENINGS AS SET FORTH BY:  
FEMA, NFIP, ICC, & ASCE  
SUPPORTIVE DOCUMENTS, TB 1-08, 44CFR 60.3(C)(5), ASCE 24-14  
ICC EVALUATION # ESR-2074



Floodproofing.com Order #100490 Shipping Confirmation!

From: Floodproofing.com <orders@floodproofing.com>  
To: markedwards@gswsa.com  
Date: 3/2/2020 10:40 AM



Floodproofing.com  
1-800-507-0865  
orders@floodproofing.com  
<https://www.floodproofing.com>  
Like us on Facebook!

**IT'S ON IT'S WAY!**  
Hello MARK EDWARDS,

Your order #100490 from Floodproofing.com is shipping on 3/2/2020!

**SHIPPING TO:**  
MARK EDWARDS  
6366 CLAY HILL RD  
GALIVANTS FERRY, SC 29544-8714 US

**SHIPPING DETAILS:**  
Carrier: FedEx  
Service: FedEx Ground®

**TRACK YOUR SHIPMENT:**  
390778551751

This shipment includes the following items:

| Item #         | Description                              | Qty |
|----------------|--|-----|
| HB-3100        | HurriBond™ 2in1 Adhesive & Caulk - WHITE | 1   |
| 1540-570 BLACK | Insulated Smart Vent Wood Wall Model     | 2   |

Thank you for your business and we look forward to serving you in the future!  
**Floodproofing.com Customer Service**

Product Pick List

| Item #                        | Description                              | Warehouse Location | # Required |
|-------------------------------|--|--------------------|------------|
| 1540-570 BLACK                | Insulated Smart Vent Wood Wall Model     |                    | 2          |
| Choose your Vent Color: Black |  |                    |            |
| Choose your Region:           |  |                    |            |
| HB-3100                       | HurriBond™ 2in1 Adhesive & Caulk - WHITE | Sargent Warehouse  | 1          |
| Choose your Color:            |  |                    |            |

Total Items Required: 3

Floodproofing.com  
5500 AIRPORT RD  
ANDERSON, SC 29626

Packing Slip



Ship To: MARK EDWARDS  
6366 CLAY HILL RD  
GALIVANTS FERRY, SC 29544  
8714 US

Order #: 100490  
Date: 2/28/2020  
User: 72  
Ship Date: 3/2/2020

| Item           | Description   | Shipping From Location | Qty |
|----------------|---|------------------------|-----|
| 1540-570 BLACK | Insulated Smart Vent Wood Wall Model<br>Choose your Vent Color: Black |                        | 2   |
| HB-3100        | HurriBond™ 2in1 Adhesive & Caulk - WHITE                              | Sargent Warehouse      | 1   |





## ICC-ES Evaluation Report

## ESR-2074 FBC Supplement

Reissued February 2019

This report is subject to renewal February 2021.

[www.icc-es.org](http://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 REPORT PURPOSE AND SCOPE

## Purpose:

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

## Applicable code editions:

- 2017 Florida Building Code—Building
- 2017 Florida Building Code—Residential

## 2.0 CONCLUSIONS

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2074, comply with the *Florida Building Code—Building* and the FRC, provided the design and installation are in accordance with the 2015 *International Building Code*® provisions noted in the master report.

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 9N-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 master report, reissued February 2019.

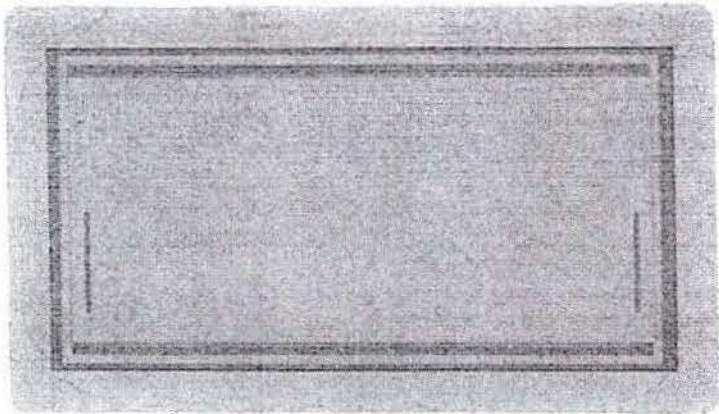


FIGURE 2—SMART VENT MODEL 1540-520

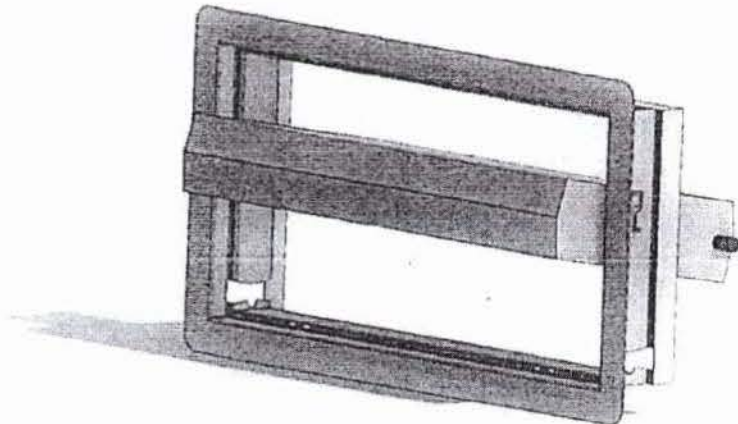


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN

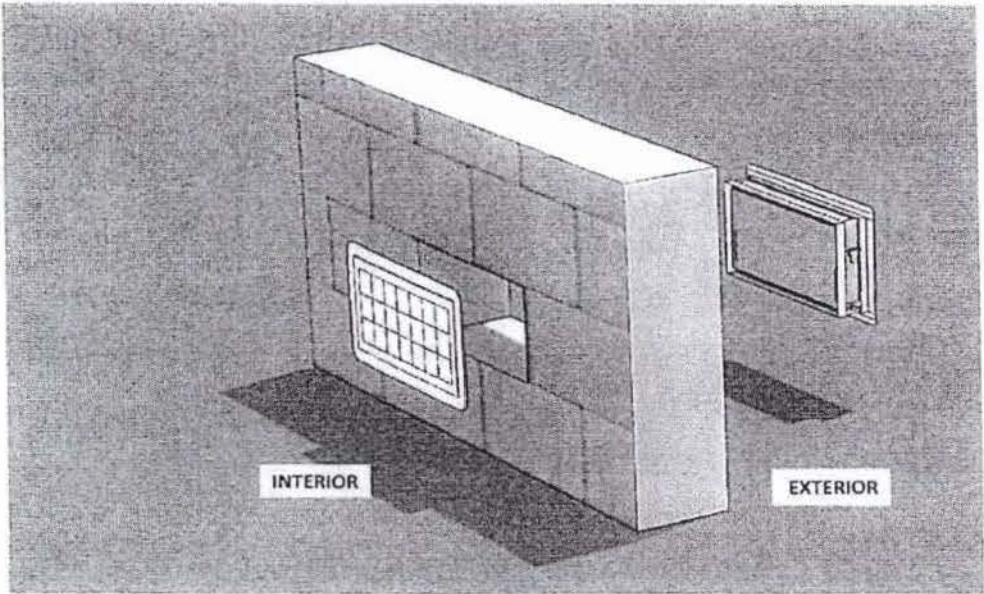


FIGURE 4—FLOOD VENT SEALING KIT



# ICC-ES Evaluation Report

**ESR-2074**

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)<sup>†</sup>

<sup>†</sup>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 mm<sup>2</sup>) of net free area to supply natural ventilation. The SmartVENT® Stacking Model #1540-511 consists of two Model #1540-510 units in one assembly, and provides 102 square inches (65 806 mm<sup>2</sup>) 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-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

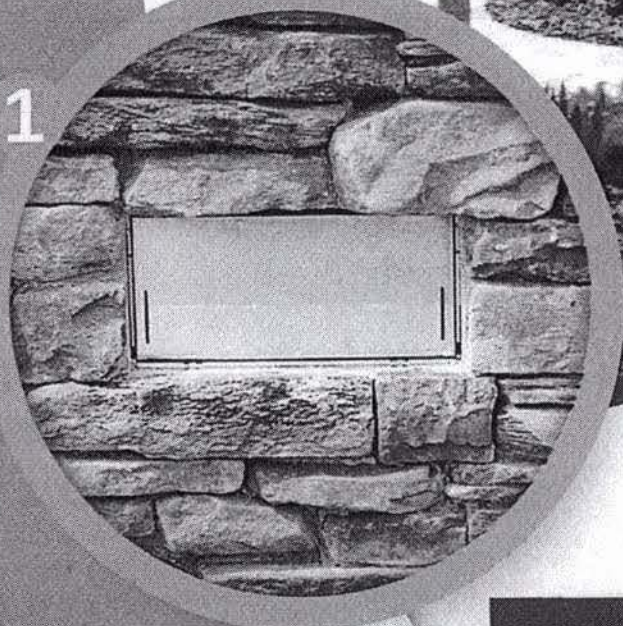




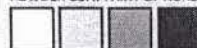
# SMART VENT®

Foundation Flood Vents

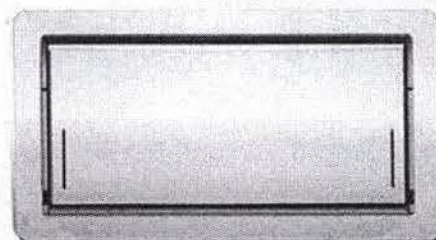
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STANDARD FINISH POWDER COAT WHITE  
POWDER COAT PAINT OPTIONS:



Custom colors also available.



| MODEL NUMBER | FLOOD COVERAGE | VENT SIZE                                      | ROUGH OPENING                             |
|--------------|----------------|--|---|
| 1540-520     | 200 sq. ft.    | 16"W x 8"H x 3"D                               | 16 $\frac{1}{4}$ in x 8 $\frac{1}{4}$ in  |
| 1540-521     | 400 sq. ft.    | 16"W x 16"H x 3"D                              | 16 $\frac{1}{4}$ in x 16 $\frac{3}{8}$ in |
| 1540-570     | 200 sq. ft.    | 14 $\frac{1}{2}$ "W x 8 $\frac{1}{2}$ "H x 3"D | 14 $\frac{1}{2}$ in x 8 $\frac{3}{4}$ in  |



To view other sizing options see Multi-frames

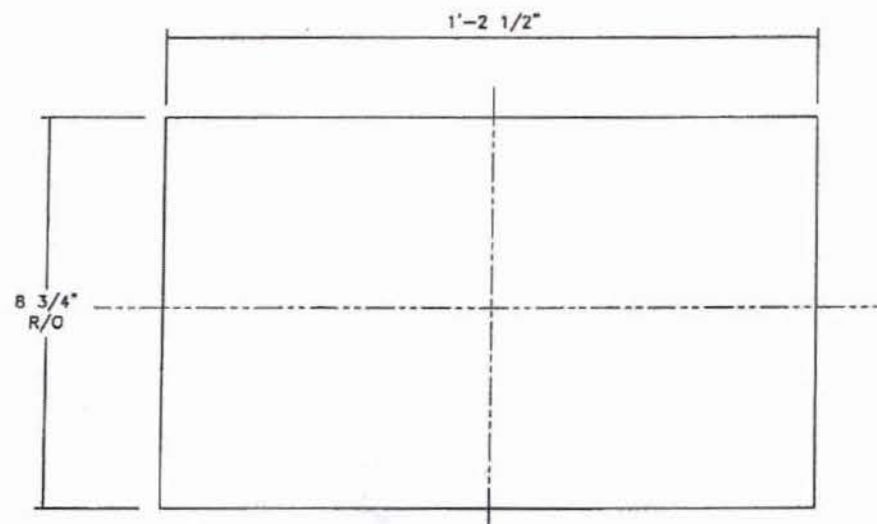
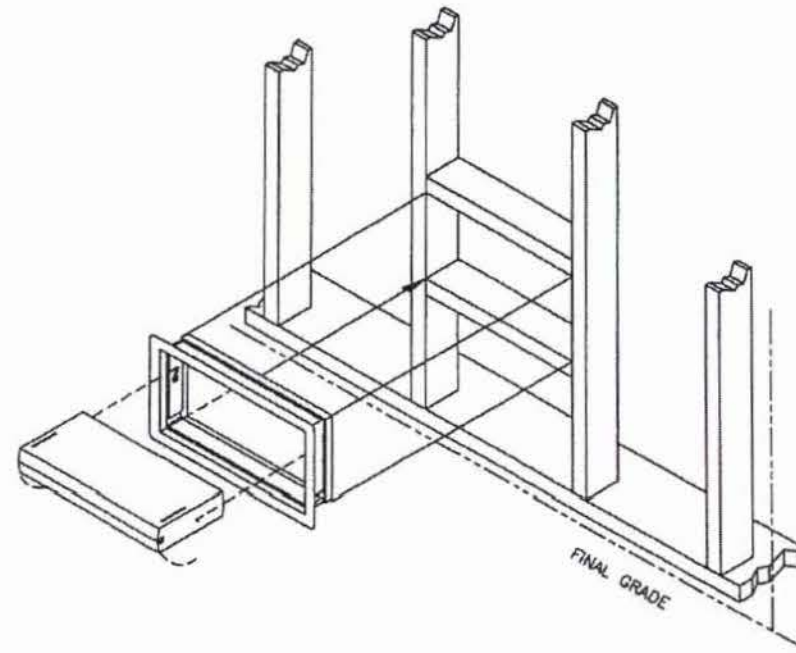
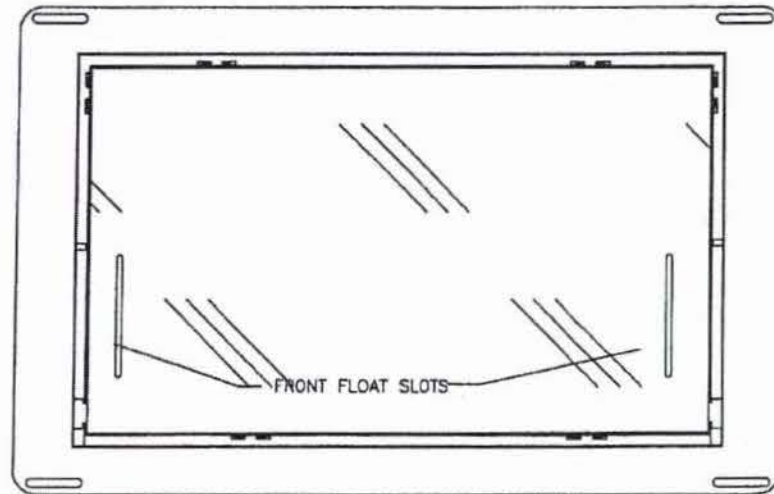
**For more information on Flood Protection Solutions, contact:**

Smart Vent 430 Andbro Drive, Unit 1 • Pitman, NJ 08071

Website: [www.smartvent.com](http://www.smartvent.com) Tel: (877) 441-8368 Email: [info@smartvent.com](mailto:info@smartvent.com)



DETAIL DIAGRAM  
MODEL 1540-570  
14.5" WOOD WALL INSULATED



ROUGH OPENING DIAGRAM  
DESIGNED TO FIT BETWEEN 2 BI WOOD STUDS

  
SMART VENT®  
877-441-8368  
WWW.SMARTVENT.COM

SMART VENT FOUNDATION FLOOD VENTS  
430 ANDRO DR., UNIT 1  
PITMAN NJ 08071

14.5" WOOD WALL INSULATED  
MODEL 1540-570

|               |                     |          |
|---------------|---------------------|----------|
| SIZE<br>A     | DWG NO.<br>1540-570 | REV<br>A |
| DATE: 6-21-16 | SHEET 1 OF 2        |          |