

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

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: <u>ASPEN GREY HOMES</u> | Policy Number: _____ |
| A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: | Company NAIC Number: _____ |
| A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Number: <u>2404 QUENBY STREET</u> | |
| City: <u>HOUSTON</u> State: <u>TEXAS</u> ZIP Code: <u>77005</u> | |
| A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): <u>RESIDENTIAL</u> | |
| A5. Latitude/Longitude: Lat. <u>29.721548</u> Long. <u>-95.415119</u> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983 <input type="checkbox"/> WGS 84 | |
| A6. Attach at least two and when possible four clear color photographs (one for each side) of the building (see Form pages 7 and 8). | |
| A7. Building Diagram Number: <u>8</u> | |
| A8. For a building with a crawlspace or enclosure(s): | |
| a) Square footage of crawlspace or enclosure(s): <u>1008</u> sq. ft. | |
| b) Is there at least one permanent flood opening on two different sides of each enclosed area? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade: | |
| Non-engineered flood openings: <u>N/A</u> Engineered flood openings: <u>5</u> | |
| d) Total net open area of non-engineered flood openings in A8.c: <u>N/A</u> sq. in. | |
| e) Total rated area of engineered flood openings in A8.c (attach documentation – see Instructions): <u>1250</u> sq. ft. | |
| f) Sum of A8.d and A8.e rated area (if applicable – see Instructions): <u>N/A</u> sq. ft. | |
| A9. For a building with an attached garage: | |
| a) Square footage of attached garage: <u>431</u> sq. ft. | |
| b) Is there at least one permanent flood opening on two different sides of the attached garage? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade: | |
| Non-engineered flood openings: <u>N/A</u> Engineered flood openings: <u>3</u> | |
| d) Total net open area of non-engineered flood openings in A9.c: <u>N/A</u> sq. in. | |
| e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instructions): <u>750</u> sq. ft. | |
| f) Sum of A9.d and A9.e rated area (if applicable – see Instructions): <u>N/A</u> sq. ft. | |
| SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION | |
| B1.a. NFIP Community Name: <u>CITY OF HOUSTON</u> B1.b. NFIP Community Identification Number: <u>480296</u> | |
| B2. County Name: <u>HARRIS</u> B3. State: <u>TEXAS</u> B4. Map/Panel No.: <u>-48201C0860</u> B5. Suffix: <u>L</u> | |
| B6. FIRM Index Date: <u>11/15/2019</u> B7. FIRM Panel Effective/Revised Date: <u>6/18/2007</u> | |
| B8. Flood Zone(s): <u>X-SHADED</u> B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth): <u>43.8</u> | |
| B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9: | |
| <input checked="" type="checkbox"/> FIS <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other: _____ | |
| B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input checked="" type="checkbox"/> Other/Source: <u>NAVD 1988, 2001 ADJ.</u> | |
| 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 | |
| Designation Date: <u>N/A</u> <input type="checkbox"/> CBRS <input type="checkbox"/> OPA | |
| B13. Is the building located seaward of the Limit of Moderate Wave Action (LiMWA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

QUEM00-0102-ECF

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

2404 QUENBY STREET

City: HOUSTON

State: TEXAS

ZIP Code: 77005

FOR INSURANCE COMPANY USE

Policy Number: _____

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, AO, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, A99. Complete Items C2.a–h below according to the Building Diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: HCFCDRM:040128 ; 49.86 Vertical Datum: NAVD 1988 2001 (ADJUSTMENT)

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929 NAVD 1988 Other: NAVD 1988 2001 (ADJUSTMENT)

Datum used for building elevations must be the same as that used for the BFE. Conversion factor used?

Yes No

If Yes, describe the source of the conversion factor in the Section D Comments area.

Check the measurement used:

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

48.30

feet meters

b) Top of the next higher floor (see Instructions):

51.18

feet meters

c) Bottom of the lowest horizontal structural member (see Instructions):

N/A

feet meters

d) Attached garage (top of slab):

47.87

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):

49.71

feet meters

f) Lowest Adjacent Grade (LAG) next to building: Natural Finished

47.28

feet meters

g) Highest Adjacent Grade (HAG) next to building: Natural Finished

47.63

feet meters

h) Finished LAG at lowest elevation of attached deck or stairs, including structural support:

47.82

feet 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 state 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 and describe in the Comments area.

Certifier's Name: LISA DOBROWSKI

License Number: 6544

Title: REGISTERED PROFESSIONAL LAND SURVEYOR

Company Name: EXACTA LAND SURVEYOR - HOUSTON

Address: 5353 W SAM HOUSTON PKWY N SUITE 150

City: HOUSTON

State: TEXAS

ZIP Code: 77041

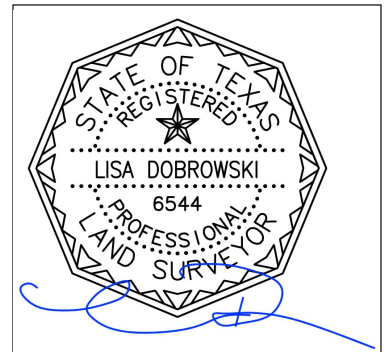
Signature: _____

Date: 6/8/2026

Telephone: P: (281)937-2731

Ext.: _____

Email: _____



Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance 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):

HOUSE PLANS (M008 3648-L3D) PROVIDED BY CLIENT.
FLOOD VENT INFORMATION: FFV-1608 FREEDOM FLOOD VENT
HOUSE: 5 @ 250 SQ FT EACH COVERAGE
GARAGE: 3 @ 250 SQ FT EACH COVERAGE
C2E = AC PAD 49.71'
500 YEAR BFE=47.4'

CENTERLINE ROAD ELEVATION: N/A

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

QUEM00-0102-ECF

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

2404 QUENBY STREET

City: HOUSTON

State: TEXAS

ZIP Code: 77005

FOR INSURANCE COMPANY USE

Policy Number: _____

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 Items E1–E4, use natural grade, if available. If the Certificate is intended to support a Letter of Map Change request, complete Sections A, B, and C. Check the measurement used. In Puerto Rico only, 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 following and check the appropriate boxes to show whether the measurement is above or below the natural HAG and the 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 (C2.b in applicable Building Diagram) 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 AUTHORIZED REPRESENTATIVE) CERTIFICATION

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

Check here if attachments and describe in the Comments area.

Property Owner or Owner's Authorized Representative Name: _____

Address: _____

City: _____ State: _____ ZIP Code: _____

Signature: _____ Date: _____

Telephone: _____ Ext.: _____ Email: _____

Comments:

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

QUEM00-0102-ECF

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

2404 QUENBY STREET

City: HOUSTON State: TEXAS ZIP Code: 77005

FOR INSURANCE COMPANY USE

Policy 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: _____
- G7. Date Certificate of Compliance/Occupancy Issued: _____
- G8. This permit has been issued for: New Construction Substantial Improvement
- G9.a. Elevation of as-built lowest floor (including basement) of the building: _____ feet meters Datum: _____
- G9.b. Elevation of bottom of as-built lowest horizontal structural member: _____ feet meters Datum: _____
- G10.a. BFE (or depth in Zone AO) of flooding at the building site: _____ feet meters Datum: _____
- G10.b. Community's minimum elevation (or depth in Zone AO) requirement for the lowest floor or lowest horizontal structural member: _____ feet meters Datum: _____
- 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):

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

QUEM00-0102-ECF

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

2404 QUENBY STREET

City: HOUSTON

State: TEXAS

ZIP Code: 77005

FOR INSURANCE COMPANY USE

Policy Number: _____

Company NAIC Number: _____

SECTION H – BUILDING'S FIRST FLOOR HEIGHT INFORMATION FOR ALL ZONES (SURVEY NOT REQUIRED) (FOR INSURANCE PURPOSES ONLY)

The property owner, owner's authorized representative, or local floodplain management official may complete Section H for all flood zones to determine the building's first floor height for insurance purposes. Sections A, B, and I must also be completed. Enter heights to the nearest tenth of a foot (nearest tenth of a meter in Puerto Rico). **Reference the Foundation Type Diagrams (at the end of Section H Instructions) and the appropriate Building Diagrams (at the end of Section I Instructions) to complete this section.**

H1. Provide the height of the top of the floor (as indicated in Foundation Type Diagrams) above the Lowest Adjacent Grade (LAG):

a) **For Building Diagrams 1A, 1B, 3, and 5–8.** Top of bottom _____ feet meters above the LAG floor (include above-grade floors only for buildings with crawlspaces or enclosure floors) is:

b) **For Building Diagrams 2A, 2B, 4, and 6–9.** Top of next higher floor (i.e., the floor above basement, crawlspace, or enclosure floor) is: _____ feet meters above the LAG

H2. Is **all** Machinery and Equipment servicing the building (as listed in Item H2 instructions) elevated to or above the floor indicated by the H2 arrow (shown in the Foundation Type Diagrams at end of Section H instructions) for the appropriate Building Diagram?

Yes No

SECTION I – PROPERTY OWNER (OR OWNER'S AUTHORIZED REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and H must sign here. *The statements in Sections A, B, and H are correct to the best of my knowledge.* **Note:** If the local floodplain management official completed Section H, they should indicate in Item G2.b and sign Section G.

Check here if attachments are provided (including required photos) and describe each attachment in the Comments area.

Property Owner or Owner's Authorized Representative Name: _____

Address: _____

City: _____ State: _____ ZIP Code: _____

Signature: _____ Date: _____

Telephone: _____ Ext.: _____ Email: _____

Comments:

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

See Instructions for Item A6.

QUEM00-0102-
ECF

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

2404 QUENBY STREET

City: HOUSTON

State: TEXAS

ZIP Code: 77005

FOR INSURANCE COMPANY USE

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.

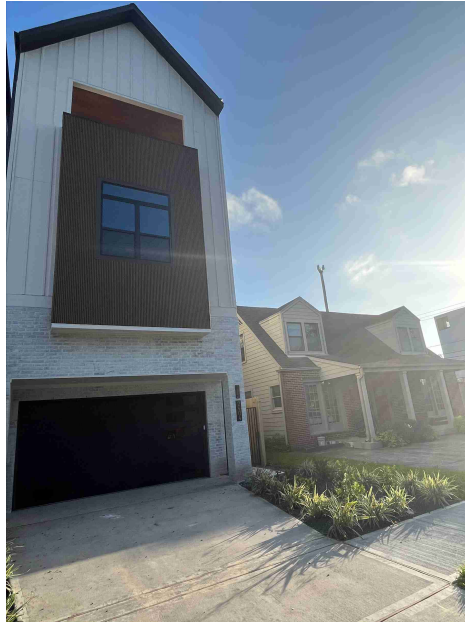


Photo One

Photo One Caption: Front View 06/11/2026



Photo Two

Photo Two Caption: Rear View 05/22/2026

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

Continuation Page

QUEM00-0102-
ECF

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

2404 QUENBY STREET

City: HOUSTON

State: TEXAS

ZIP Code: 77005

FOR INSURANCE COMPANY USE

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.

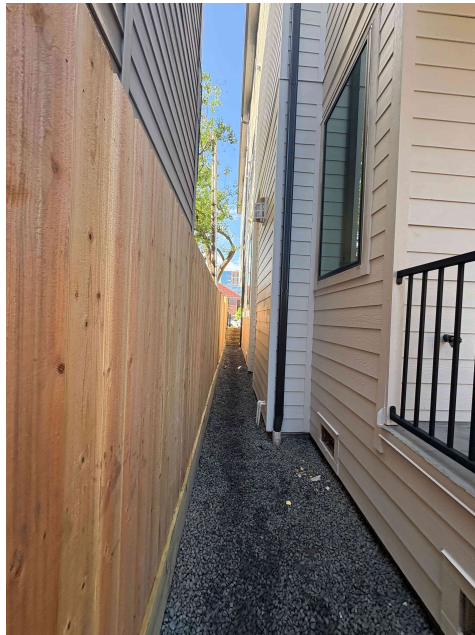


Photo Three

Photo Three Caption: Right Side View 05/22/2026



Photo Four

Photo Four Caption: Left Side View 06/08/2026

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

See Instructions for Item A6.

QUEM00-0102-
ECF

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

2404 QUENBY STREET

City: HOUSTON

State: TEXAS

ZIP Code: 77005

FOR INSURANCE COMPANY USE

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 Five

Photo Five Caption:

Photo Six

Photo Six Caption:

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

See Instructions for Item A6.

QUEM00-0102-
ECF

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

2404 QUENBY STREET

City: HOUSTON State: TEXAS ZIP Code: 77005

FOR INSURANCE COMPANY USE

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 Seven

Photo Seven Caption:

Photo Eight

Photo Eight Caption:

ICC-ES Evaluation Report

ESR-4332

Reissued March 2024

Revised June 2024

Subject to renewal March 2026


This report also contains:

- CBC Supplement

- FBC Supplement

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.

Copyright © 2024 ICC Evaluation Service, LLC. All rights reserved.

| | | | |
|--|--|---|---|
| <p>DIVISION: 08 00 00— OPENINGS</p> <p>Section: 08 95 43— Vents / Foundation Flood Vents</p> | <p>REPORT HOLDER: SMART PRODUCT INNOVATIONS, INC.</p> | <p>EVALUATION SUBJECT: FREEDOM FLOOD VENT® AUTOMATIC FOUNDATION FLOOD VENT: MODEL FFV-1608</p> |  |
|--|--|---|---|

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2024, 2021, 2018, 2015, 2012, 2009 and 2006 [International Building Code® \(IBC\)](#)
- 2024, 2021, 2018, 2015, 2012, 2009 and 2006 [International Residential Code® \(IRC\)](#)

Properties evaluated:

- Physical operation
- Water flow
- Weathering

2.0 USES

The model FFV-1608 Freedom Flood Vent® is used to equalize hydrostatic pressure on walls of enclosures subject to rising or falling floodwaters. With the cover removed, the model FFV-1608 also provides natural air ventilation.

3.0 DESCRIPTION

3.1 General:

The model FFV-1608 Freedom Flood Vent® is an engineered mechanically operated in-wall flood vent (FV) that automatically allows floodwater to enter an enclosed area and exit. The FV is comprised of a polycarbonate frame with mounting flange and a polycarbonate horizontally pivoting door. When subjected to rising water, the model FFV-1608 Freedom Flood Vent® door is activated and pivots to allow water and debris to flow in either direction to equalize hydrostatic pressure from one side of the enclosure to the other. The FV features a removable polycarbonate cover. The FV door will activate and pivot when subjected to rising water with or without the polycarbonate cover installed.

3.2 Engineered Opening:

The FV complies with the design principle noted in Section 2.7.2.2 and Section 2.7.3 of ASCE/ SEI 24-14 (2024, 2021, 2018 and 2015 IBC and IRC) [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, Freedom Flood Vent® FVs must be installed in accordance with Section 4.0 below. See [Table 1](#) for vent size and maximum allowable area coverage for a single vent.

4.0 DESIGN AND INSTALLATION

The model FFV-1608 Freedom Flood Vent® is designed to be installed into walls or overhead doors of existing or new construction. Installation of the vent must be in accordance with the manufacturer’s instructions, the applicable code, and this report. In order to comply with the engineered opening design principle noted in Sections 2.7.2.2 and 2.7.3 of ASCE/ SEI 24-14 (2024, 2021, 2018 and 2015 IBC and IRC) [Section 2.6.2.2 of ASCE/ SEI 24-05 (2012, 2009, 2006 IBC and IRC)], the Freedom

Flood Vent® 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 250 square feet (23.2 m2) of enclosed area.
- Below the base flood elevation.
- With the bottom of the vent located a maximum of 12 inches (305.4 mm) above the higher of the final interior grade or floor and the finished exterior grade immediately under each opening.

5.0 CONDITIONS OF USE:

The Freedom Flood Vent® described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The model FFV-1608 Freedom Flood Vent® unit must be installed in accordance with this report, the applicable code and the manufacturer’s published installation instructions. In the event of a conflict, the instructions in this report shall govern.
- 5.2 The model FFV-1608 Freedom Flood Vent® unit must not be used in place of “breakaway walls” in coastal high hazard areas, but are permitted for use in conjunction with breakaway walls in other areas.
- 5.3 Use of the Freedom Flood Vent as under-floor space ventilation is outside the scope of this report.
- 5.4 FFV–1608 Freedom Flood Vent® is manufactured in Gastonia, North Carolina under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the [ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents \(AC364\)](#), dated August 2015 (editorially revised February 2024).

7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-4332) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.
- 7.2 In addition, the Freedom Flood Vent® model described in this report must be identified by a label bearing the manufacturer’s name (Smart Product Innovations, Inc.) and the evaluation report number (ESR-4332).
- 7.3 The report holder’s contact information is the following:

SMART PRODUCT INNOVATIONS, INC.
19 MANTUA ROAD
MOUNT ROYAL, NEW JERSEY 08061
(800) 507-1527
www.freedomfloodvent.com
info@freedomfloodvent.com

TABLE 1—FREEDOM FLOOD VENT®

| MODEL NAME | MODEL NUMBER | MODEL SIZE | COVERAGE ¹ (ft ²) |
|---------------------|--------------|---|--|
| Freedom Flood Vent® | FFV-1608 | 15 ³ / ₄ " X 8 ¹ / ₁₆ " | 250 |

For **SI**: 1 inch = 25.4 mm

¹The enclosed coverage area in square feet is equivalent to the performance of the same number of square inches of non-engineered openings.

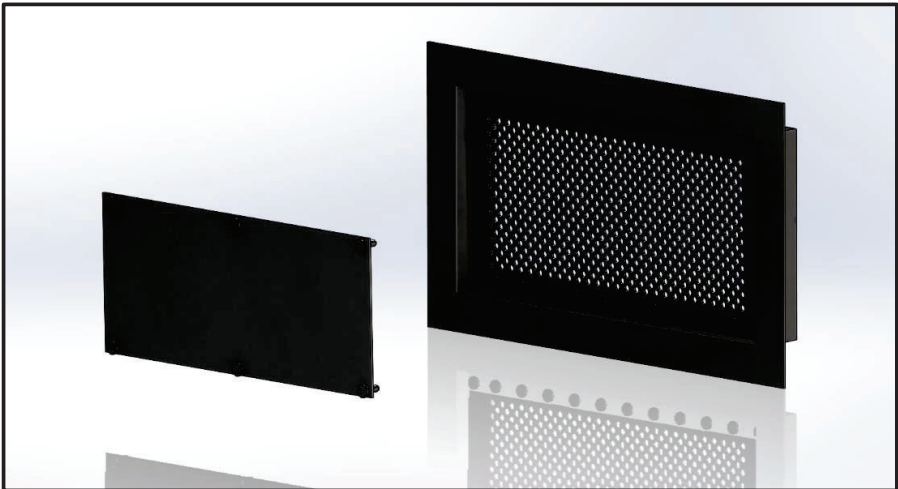


FIGURE 1—MODEL FFV-1608 FREEDOM FLOOD VENT®: SHOWN WITH COVER REMOVED

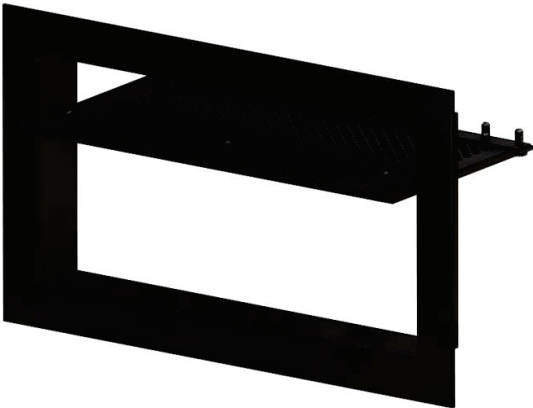


FIGURE 2—MODEL FFV-1608 FREEDOM FLOOD VENT®: SHOWN WITH FLOOD DOOR PIVOTED OPEN

DIVISION: 08 00 00—OPENINGS

Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMART PRODUCT INNOVATIONS, INC.

EVALUATION SUBJECT:

FREEDOM FLOOD VENT® AUTOMATIC FOUNDATION FLOOD VENT: MODEL FFV-1608

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Freedom Flood Vent® Automatic Foundation Flood Vent: Model FFV-1608, described in ICC-ES evaluation report ESR-4332, has also been evaluated for compliance with codes noted below.

Applicable code editions:

- 2022 *California Building Code* (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide 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.

- 2022 *California Residential Code* (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Freedom Flood Vent® Automatic Foundation Flood Vent: Model FFV-1608, described in Sections 2.0 through 7.0 of the evaluation report ESR-4332, complies with CBC Chapter 12 provided the design and installation are in accordance with the 2021 *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 Freedom Flood Vent® Automatic Foundation Flood Vent: Model FFV-1608, described in Sections 2.0 through 7.0 of the evaluation report ESR-4332, complies with the CRC, provided the design and installation are in accordance with the 2021 *International Residential Code*® (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued March 2024 and revised June 2024.

DIVISION: 08 00 00—OPENINGS

Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMART PRODUCT INNOVATIONS, INC.

EVALUATION SUBJECT:

FREEDOM FLOOD VENT® AUTOMATIC FOUNDATION FLOOD VENT: MODEL FFV-1608

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Freedom Flood Vent® Automatic Foundation Flood Vent: Model FFV-1608, described in ICC-ES evaluation report ESR-4332, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2023 Florida Building Code—Building
- 2023 Florida Building Code—Residential

2.0 CONCLUSIONS

The Freedom Flood Vent® Automatic Foundation Flood Vent: Model FFV-1608, described in Sections 2.0 through 7.0 of the evaluation report ESR-4332, complies with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, provided the design requirements must be determined in accordance with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-4332 for the 2021 *International Building Code*® (IBC) meet the requirements of *Florida Building Code—Building* and the *Florida Building Code—Residential*, as applicable.

Use of the Freedom Flood Vent® Automatic Foundation Flood Vent: Model FFV-1608 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 March 2024 and revised June 2024.