

# 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 Ernest Signature Custom Homes, LLC					Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 24 Spoonbill Drive					Company NAIC Number:
City Richmond Hill		State Georgia		ZIP Code 31324	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Lot 186A Dunham Marsh Ph 3C (2015)					
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Residential</u>					
A5. Latitude/Longitude: Lat. <u>31°51'11.57"N</u> Long. <u>81°16'49.54"W</u> 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 <u>1B</u>					
A8. For a building with a crawlspace or enclosure(s):					
a) Square footage of crawlspace or enclosure(s) <u>N/A</u> sq ft					
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>N/A</u>					
c) Total net area of flood openings in A8.b <u>N/A</u> sq in					
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
A9. For a building with an attached garage:					
a) Square footage of attached garage <u>445.00</u> sq ft					
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>4</u>					
c) Total net area of flood openings in A9.b <u>544.00</u> sq in					
d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number Bryan County 130016			B2. County Name Bryan (unincorporated)		B3. State Georgia
B4. Map/Panel Number 13029C0375	B5. Suffix D	B6. FIRM Index Date 08-02-2018	B7. FIRM Panel Effective/ Revised Date 08-02-2018	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 9.0
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <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 type="checkbox"/> NGVD 1929 <input checked="" 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 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. 24 Spoonbill Drive			Policy Number:
City Richmond Hill	State Georgia	ZIP Code 31324	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: AB3037 Vertical Datum: NAVD 1988

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)   | 10.9 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor   | 21.4 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)   | N/A  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)  | 9.6  | <input checked="" 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) | 10.9 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)  | 7.6  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)   | 9.5  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                                  | 7.6  | <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 David A. Brunson	License Number 2538	
Title President		
Company Name Southeast Georgia Surveying, P.C.		
Address 10 Miller Drive		
City Richmond Hill	State Georgia	

Signature 	Date 10-21-2022	Telephone (912) 756-2211	Ext.
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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)  
 Job #22-24 Lot 186A Dunham Marsh Ph 3C (2015) Latitude and Longitude were obtained from Google Earth. The lowest servicing equipment for C2e is an A/C unit located on the right side of house. The two vents located at the front of house are engineered vents by Flood Flaps, LLC model # FFNF05 with a total net area of 440 square inches. The two vents in the garage door are Wayne-Dalton louver vents with a total net area of 104 square inches. Total 544 square inches for all four vents.

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City Richmond Hill	State Georgia	ZIP Code 31324	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.

# ELEVATION CERTIFICATE

OMB No. 1660-0008  
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<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. 24 Spoonbill Drive			Policy Number:
City Richmond Hill	State Georgia	ZIP Code 31324	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
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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
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Community Name	Telephone
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Signature	Date
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Comments (including type of equipment and location, per C2(e), if applicable)

Check here if attachments.

# BUILDING PHOTOGRAPHS

## ELEVATION CERTIFICATE

See Instructions for Item A6.

OMB No. 1660-0008

Expiration Date: November 30, 2022

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City Richmond Hill	State Georgia	ZIP Code 31324	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 & Right Side View (showing the lowest servicing equipment for C2e ) taken 10-20-2022 Clear Photo One



Photo Two

Photo Two Caption Rear View taken 10-20-2022 Clear Photo Two



# BUILDING PHOTOGRAPHS

## ELEVATION CERTIFICATE

Continuation Page

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

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Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 24 Spoonbill Drive			Policy Number:
City Richmond Hill	State Georgia	ZIP Code 31324	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 Left Side View (showing two engineered vents in the garage) taken 10-20-2022

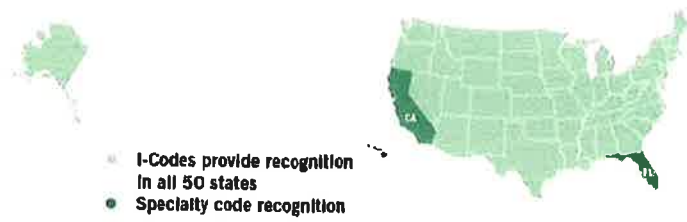
Clear Photo Three



Photo Four

Photo Four Caption Left Side View of garage (showing two louver vents in the garage door) taken 10-20-2022

Clear Photo Four



- I-Codes provide recognition in all 50 states
- Specialty code recognition

# ICC-ES Evaluation Report

## ESR-3560

Reissued September 2021

This report is subject to renewal September 2022.

**DIVISION: 08 00 00—OPENINGS**  
**Section: 08 95 43—Vents/Foundation Flood Vents**

**REPORT HOLDER:**

FLOOD FLAPS®, LLC

**EVALUATION SUBJECT:**

FLOOD FLAPS® AUTOMATIC FLOOD VENTS: MODELS  
FFWF12; FFNF12; FFWF08; FFNF08; FFWF05; FFNF05

### 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018, 2015, 2012 and 2009 *International Building Code*® (IBC)
- 2018, 2015, 2012 and 2009 *International Residential Code*® (IRC)

Properties evaluated:

- Physical operation
- Water flow
- Weathering

### 2.0 USES

Flood Flaps® automatic flood vents are used to provide for the equalization of hydrostatic flood forces on exterior walls. Certain models also allow natural ventilation.

### 3.0 DESCRIPTION

#### 3.1 General:

Flood Flaps® automatic flood vents are engineered mechanically operated flood vents (FVs) that automatically allow flood waters to enter and exit enclosed areas. The FVs are constructed of ABS plastic which serves as the FV's housing, and a front grill that contains an anodized metal screen imbedded in polypropylene plastic. On contact with rising flood water, the grill will disengage from its secured position, allowing flood water and debris to flow through in either direction. The FVs are available in two series as described in Section 3.3.

The sealed series models contain two rubber flaps that close the FV to the passage of air when using with conditioned areas or sealed crawl spaces. In the same manner as the grill, the two rubber flaps are pushed open

by water pressure, allowing water and debris to flow through the FV in either direction. See Figure 1 for an illustration of the Flood Flaps® automatic FV.

#### 3.2 Engineered Opening:

The Flood Flaps® automatic FVs comply with the design principle noted in Sections 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 (2018 and 2015 IBC and IRC) [Section 2.6.2.2 of ASCE/SEI 24-05 (2012 and 2009 IBC and IRC)] for a rate of rise and fall of 5 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Flood Flaps® automatic FVs must be installed in accordance with Section 4.0.

#### 3.3 Flood Vent Series Models:

Flood Flaps® automatic FVs are available in two series with multiple models and sizes as described in Table 1. The sealed series models, designated FFWF, include two rubber flaps for the prevention of air flow. The multi-purpose series, designated FFNF, omits the rubber flaps.

#### 3.4 Natural Ventilation:

Flood Flaps® automatic FV models FFNF12, FFNF08, FFNF05, and FFNF02 have metal screens with 1/4 inch by 1/4 inch (6 mm by 6 mm) openings and provide 37 square inches (0.02 m<sup>2</sup>) of net free opening to supply natural ventilation for under-floor ventilation. Flood Flaps® automatic FV models FFWF12, FFWF08, and FFWF05 have not been evaluated for use as openings for under-floor ventilation.

### 4.0 DESIGN AND INSTALLATION

Flood Flaps® automatic FVs are designed to be installed into walls of existing or new construction. Installation of the FVs must be in accordance with the manufacturer's instructions, the applicable code and this report. Flood Flaps® automatic FVs can be installed in wood, masonry and concrete walls up to a thickness of 12 inches (305 mm). 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 (2018 and 2015 IBC and IRC) [Section 2.6.2.2 of ASCE/SEI 24-05 (2012 and 2009 IBC and IRC)], the Flood Flaps® 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 220 square feet (20 m<sup>2</sup>) of enclosed area.
- Below the base flood elevation.

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.



- With the bottom of the FV located a maximum of 12 inches (305 mm) above grade.

**5.0 CONDITIONS OF USE**

The Flood Flaps® automatic flood vents 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 Flood Flaps® automatic 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 Flood Flaps® automatic FVs 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.

**6.0 EVIDENCE SUBMITTED**

Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015 (editorially revised October 2017).

**7.0 IDENTIFICATION**

- 7.1 The Flood Flaps® models recognized in this report are identified by a label bearing the manufacturer's name, the model number, and the evaluation report number (ESR-3560).
- 7.2 The report holder's contact information is the following:

**FLOOD FLAPS®, LLC**  
**POST OFFICE BOX 1003**  
**ISLE OF PALMS, SOUTH CAROLINA 29451**  
**(843) 881-0190**  
[www.floodflaps.com](http://www.floodflaps.com)  
[info@floodflaps.com](mailto:info@floodflaps.com)

**TABLE 1—FLOOD FLAP AUTOMATIC FLOOD VENT MODEL SIZES**

MODEL NUMBER	MODEL DESIGNATION	ROUGH OPENING (Width X Height) (inches)	VENT SIZE (W X H X D) (inches)	ENCLOSED AREA COVERAGE (ft <sup>2</sup> )	NET FREE AREA OPENING <sup>1</sup> (in <sup>2</sup> )
FFWF12	Sealed Series	16 x 8	15 <sup>5</sup> / <sub>8</sub> X 7 <sup>3</sup> / <sub>4</sub> X 12	220	NA
FFNF12	Multi-Purpose	16 x 8	15 <sup>5</sup> / <sub>8</sub> X 7 <sup>3</sup> / <sub>4</sub> X 12	220	37
FFWF08	Sealed Series	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 8	220	NA
FFNF08	Multi-Purpose	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 8	220	37
FFWF05	Sealed Series	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 5	220	NA
FFNF05	Multi-Purpose	16 x 8	15 <sup>5</sup> / <sub>8</sub> x 7 <sup>3</sup> / <sub>4</sub> x 5	220	37

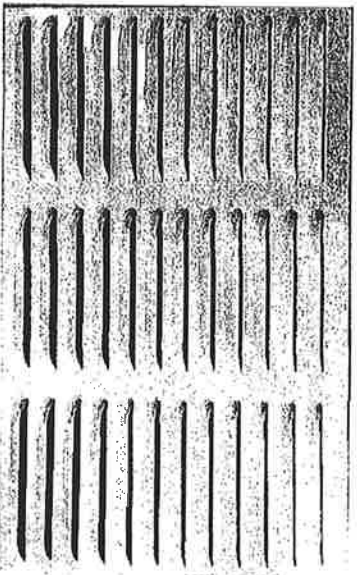
For SI: 1 inch = 25.4 mm; 1 ft<sup>2</sup> = 0.093 m<sup>2</sup>

<sup>1</sup>For under-floor ventilation only.



# Louver Technical Information

March 20, 2018



Wayne-Dalton Louvers have been tested per ANSI/DASMA 108 and meet the design pressures on the wind load approval drawings. Louvers are pre-painted white aluminum and can be installed in the bottom section of the door.

For Models 5120, 9100, 9605, 8300, 8500, 5150, and 5200, each louver has 36 square inches of net area open for flood waters.

For Models 8000, 8100, and 8200, each louver has 52 square inches of net area open for flood waters.

CONFIDENTIAL

