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

OMB No. 1660-0008
Expiration Date: November 30, 2018

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
Wallens

Policy Number:

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
720 16th Ave N.E.

Company NAIC Number:

City	State	ZIP Code
St Petersburg	Florida	33704

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
Parcel #17-31-17-83220-073-0030

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential

A5. Latitude/Longitude: Lat. 27.78716 Long. -82.62600 Horizontal Datum: ☐ NAD 1927 ☒ 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 1B

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s) 0 sq ft

b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 0

c) Total net area of flood openings in A8.b 0 sq in

d) Engineered flood openings? ☐ Yes ☒ No

A9. For a building with an attached garage:

a) Square footage of attached garage 600 sq ft

b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 5

c) Total net area of flood openings in A9.b 620 sq in

d) Engineered flood openings? ☒ Yes ☐ No

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
City of St Petersburg & 125148	Pinellas	Florida

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/ Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)
12103C/0217	G	08/18/2009	09/03/2003	AE	8.0

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:
☐ FIS Profile ☒ FIRM ☐ Community Determined ☐ Other/Source:

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source:

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No
Designation Date: ☐ CBRS ☐ OPA

ELEVATION CERTIFICATE

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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. 720 16th Ave N.E.			Policy Number:
City St Petersburg	State Florida	ZIP Code 33704	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: City of St Petersburg B.M. #8 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.

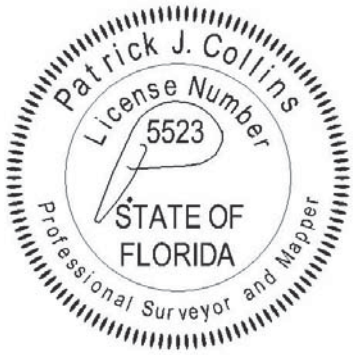
		Check the measurement used.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	10.2	☒ feet	☐ meters
b) Top of the next higher floor	22.2	☒ feet	☐ meters
c) Bottom of the lowest horizontal structural member (V Zones only)	N/A	☒ feet	☐ meters
d) Attached garage (top of slab)	7.0	☒ feet	☐ meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	10.6	☒ feet	☐ meters
f) Lowest adjacent (finished) grade next to building (LAG)	6.2	☒ feet	☐ meters
g) Highest adjacent (finished) grade next to building (HAG)	6.9	☒ feet	☐ meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	6.5	☒ 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 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	License Number	
Patrick J. Collins	5523	
Title President		
Company Name Select Surveying, Inc.		
Address 912 W CANDLEWOOD AVENUE		
City Tampa	State Florida	ZIP Code 33603
Signature Patrick Collins Digitally signed by Patrick Collins Date: 2018.05.22 09:38:29 -04'00'	Date 05/17/2018	Telephone (813) 453-4408



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)

A7. No living space above the garage.

A9. a-d) Flood Vents are Flood Solutions Model No.1608-F; they are rated for 124 square feet of coverage per vent.

C2. e) This is the elevation of the generator platform on the Westerly side of the residence.

Section D Note: Latitude and Longitude values were attained by a hand-held GPS unit by this firm and were compared to Lat./Long. values extracted from Google Earth. This firm's values were substantially in sync with G.E.

Attachments: Building Diagram, ICC-ES Report

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2018

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. 720 16th Ave N.E.			Policy Number:
City St Petersburg	State Florida	ZIP Code 33704	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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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. 720 16th Ave N.E.			Policy Number:
City St Petersburg	State Florida	ZIP Code 33704	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.

ELEVATION CERTIFICATE

BUILDING PHOTOGRAPHS

See Instructions for Item A6.

OMB No. 1660-0008
Expiration Date: November 30, 2018

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Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 720 16th Ave N.E.			Policy Number:
City St Petersburg	State Florida	ZIP Code 33704	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 VIEW

Photo Two

Photo Two Caption REAR VIEW

ELEVATION CERTIFICATE

BUILDING PHOTOGRAPHS

Continuation Page

OMB No. 1660-0008
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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. 720 16th Ave N.E.			Policy Number:
City St Petersburg	State Florida	ZIP Code 33704	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 One

Photo One Caption Flood Vent (Exterior)

Photo Two

Photo Two Caption Flood Vent (Interior)

Building Diagrams

The following diagrams illustrate various types of buildings. Compare the features of the building being certified with the features shown in the diagrams and select the diagram most applicable. Enter the diagram number in Item A7, the square footage of crawlspace or enclosure(s) and the area of flood openings in square inches in Items A8.a–c, the square footage of attached garage and the area of flood openings in square inches in Items A9.a–c, and the elevations in Items C2.a–h.

In A zones, the floor elevation is taken at the top finished surface of the floor indicated; in V zones, the floor elevation is taken at the bottom of the lowest horizontal structural member (see drawing in instructions for Section C).

DIAGRAM 1A

All slab-on-grade single- and multiple-floor buildings (other than split-level) and high-rise buildings, either detached or row type (e.g., townhouses); with or without attached garage.

Distinguishing Feature – The bottom floor is at or above ground level (grade) on at least 1 side.*

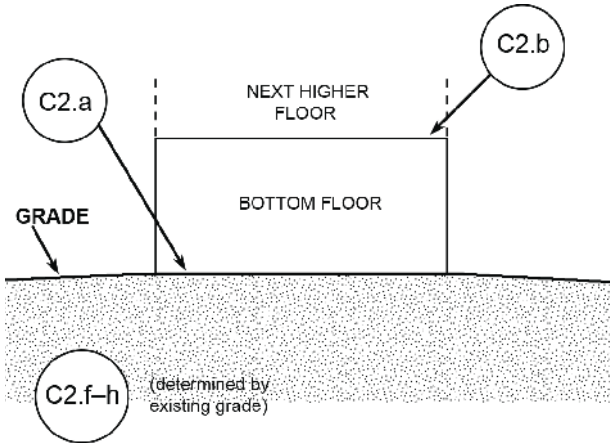


DIAGRAM 1B

All raised-slab-on-grade or slab-on-stem-wall-with-fill single- and multiple-floor buildings (other than split-level), either detached or row type (e.g., townhouses); with or without attached garage.

Distinguishing Feature – The bottom floor is at or above ground level (grade) on at least 1 side.*

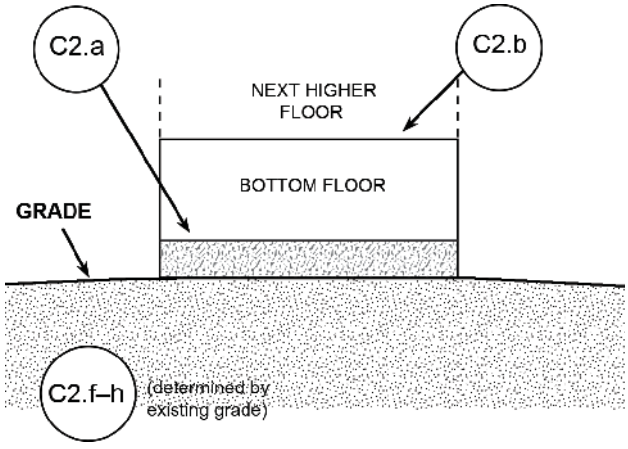


DIAGRAM 2A

All single- and multiple-floor buildings with basement (other than split-level) and high-rise buildings with basement, either detached or row type (e.g., townhouses); with or without attached garage.

Distinguishing Feature – The bottom floor (basement or underground garage) is below ground level (grade) on all sides.*

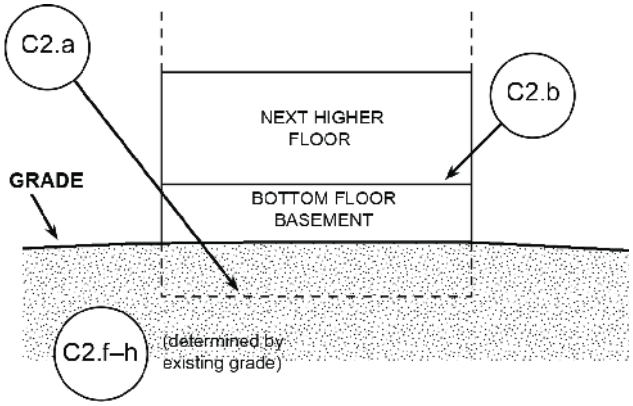
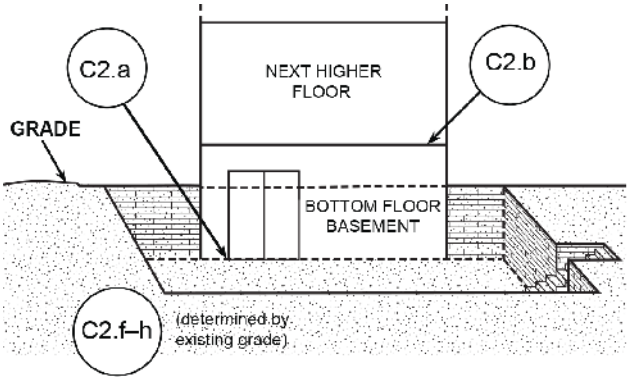


DIAGRAM 2B

All single- and multiple-floor buildings with basement (other than split-level) and high-rise buildings with basement, either detached or row type (e.g., townhouses); with or without attached garage.

Distinguishing Feature – The bottom floor (basement or underground garage) is below ground level (grade) on all sides; most of the height of the walls is below ground level on all sides; and the door and area of egress are also below ground level on all sides.*



* A floor that is below ground level (grade) on all sides is considered a basement even if the floor is used for living purposes, or as an office, garage, workshop, etc.

FEMA COMPLIANT ENGINEERED FLOOD VENTS

FLOOD SOLUTIONS™ MODEL "F"

FEMA Compliant Engineered Flood Vents meet FEMA requirements when installed properly.

- Use at least 2 flood vents per enclosed area below flood grade, installed on at least two separate walls.
- The bottom of the flood vent opening must not be higher than 12 inches above the grade.
- At least 1 square inch of engineered opening for every 1 square foot of enclosed space.
- An engineered certificate from the state in which the building is located is required for all engineered openings without ICC-ES certification.

Qty	Model	Minimum Opening Required	Engineered Opening Covers
	1412-F	14-1/2"Wide x 12"High	145 sq ft
	1608-F	16"Wide x 8" High	124 sq ft
	1616-F	16"Wide x 16"High	221 sq ft
	2412-F	24"Wide x 12"High	274 sq ft
	2416-F	24"Wide x 16"High	362 sq ft
	3208-F	32"Wide x 8"High	252 sq ft

Finishes	
	Black Kynar
	Light Grey Kynar
	Light Tan Kynar
	No Finish (for field painting)

Frame: **1-1/4" DEEP, 1" Front Flange**; heavy gauge extruded aluminum sections, minimum .125" thickness
Blades: Heavy gauge extruded aluminum sections, minimum .063" thickness
Construction: Extruded aluminum sections mechanically fastened
Insect/Rodent Screen: Heavy-duty aluminum insect & rodent screen; rear mounted

FLOOD SOLUTIONS, LLC.
One Industrial Park Drive,
Bldg. 27
Pelham NH, 03076
Toll Free: 1-800-325-9775
In NH: 603-595-5222
Fax: 603-595-4778
www.floodsolutions.com
info@floodsolutions.com

PROJECT:	
CONTRACTOR:	
RETAILER:	
DATE:	

CERTIFICATION OF ENGINEERED FLOOD OPENINGS (FEMA TB-1 August 2008)

I do hereby certify that the **FLOOD SOLUTIONS LLC** Flood Vent properly installed and sized in accordance with Federal Emergency Management Agency's (FEMA's) National Flood Program regulations is designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for entry and exit of floodwater during floods up to and including the base 100-year flood.

I also do hereby certify that I calculated the Non Engineered Net Free Air and Engineered Opening size for each model and size of FLOOD SOLUTIONS LLC flood vents. The results of the calculations are recorded in the table below. The Engineered size opening calculation was performed using the formula in FEMA Technical Bulletin 1 – August 2008, Openings in Foundation Walls for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program (NFIP) and ASCE/SEI 24-05, Flood Resistance Design and Construction.
I measured the Non Engineered Net Free Air by calculating the minimum distance between the top blade and the top of the vent times the clear opening width of the vent; plus the minimum distance between the bottom blade and the bottom of the vent the clear opening width of the vent; plus the minimum distance between each blade times the number of spaces between the blades in vent times the clear opening width of the vent.

I used the formula in TB 1 – August 2008 ($A^0 = 0.033\ [1/C]\ RA\hat{e}$) to determine the Engineered Opening size for each model listed below. I used the following assumptions: A^0 = total net area of openings required (in^2); 0.033 = coefficient corresponding to a factor of safety of 5.0 ($in^2\ hr/ft^3$); c = 0.40 opening coefficient (ASCE 24 Table 2-3 "rectangular, long axis horizontal, short axis vertical unobstructed during design flood") or C = 0.35 (square unobstructed during design flood); R = 5 ft/hr worst case rate of rise and fall; and $A\hat{e}$ = 1 ft^2 total enclosed area.

Note: When the horizontal dimension is twice or more the vertical dimension, use 0.4; as the dimensions approach a square, interpolate from 0,4 to 0.35.

$A^0 / A\hat{e} = 0.033\ [1/C]\ R = 0.033\ [1/0.40$ for rectangle, long axis horizontal$]\ R = 0.4125\ in^2$ per ft^2
or $A^0 / A\hat{e} = 0.033\ [1/C]\ R = 0.033\ [1 / 0.35$ for square$]\ R = .4719\ in^2$ per ft^2

Each individual opening, and any louvers, screens, or other covers, shall be designed to allow automatic entry and exit of floodwaters during design flood or lesser flood conditions; there shall be a minimum of two openings on different sides of each enclosed area; if a structure has more than one enclosed area below the DFE, each area shall have openings; openings shall not be less than 3 inches in any direction in the plane of the wall; the bottom of each required opening shall be no more than 1 ft. above the adjacent grade; the difference between the exterior and interior floodwater levels shall not exceed 1 ft. during base flood conditions; in the absence of reliable data on the rates of rise and fall, assume a rate of rise and fall of 5ft/hr; where data or analysis indicated more rapid rates of rise and fall, the total net area of the required openings shall be increased to account for the higher rates of rise and fall.

MODEL Number Flood Solutions:	SIZE of WALL OPENING: (WIDTH X HEIGHT)	Net Free Air (square inches):	ENGINEERED OPENING (square inches) Each vent covers: (square ft.)
1412-F	14-1/2" x 12"	67	145
1509-F	16"x 9-1/4"	55	131
1608-F	16" x 8"	51	124
1608-D	16" x 8"	51	124
1608-C	16" x 8"	65	158
1616-F	16" x 16"	104	221
1616-D	16" x 16"	102	216
2412-F	24" x 12"	113	274
2412-D	24" x 12"	110	267
2416-F	24" x 16"	156	362
2416-D	24" x 16"	154	357
3208-F	32" x 8"	104	252
3208-D	32" x 8"	104	252

SIGNATURE: _____

NAME: DANIEL G. FARABAUGH

TYPE OF LICENSE: PROFESSIONAL ENGINEER

STATE: FLORIDA LICENSE NUMBER: 48349

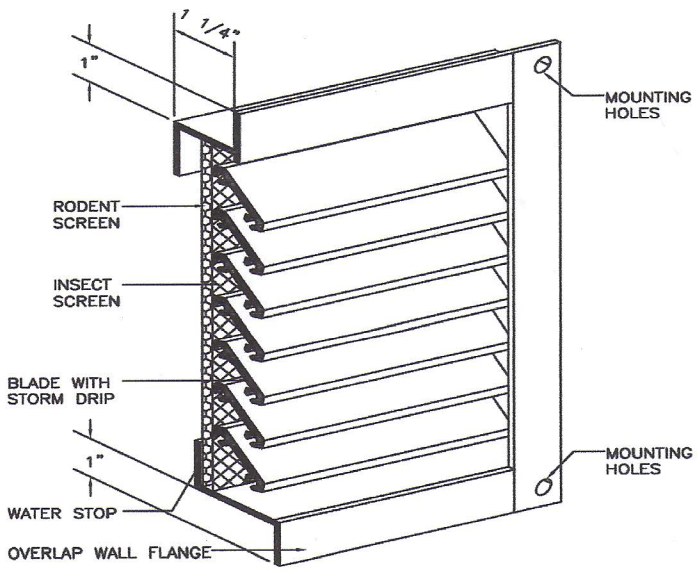
DAN FARABAUGH, P.E.
FARABAUGH ENGINEERING AND TESTING, INC.
401 WIDE DR., McKEESPORT, PA 15135

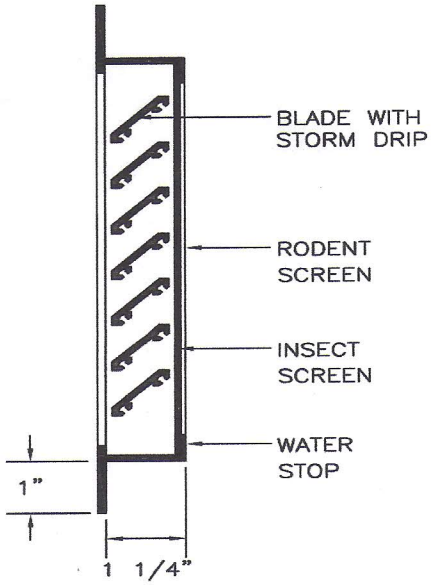
DANIEL G. FARABAUGH
LICENSE
No 48349
STATE OF FLORIDA
PROFESSIONAL ENGINEER

2/26/13

FEMA COMPLIANT ENGINEERED FLOOD VENTS

FLOOD SOLUTIONS MODEL "F"





FEMA Compliant Engineered Flood Vents meet FEMA requirements when installed properly.

- Use at least 2 flood vents per enclosed area below flood grade, installed on at least two separate walls.
- The bottom of the flood vent opening must not be higher than 12 inches above the grade.
- At least 1 square inch of engineered opening for every 1 square foot of enclosed space.
- An engineered certificate from the state in which the building is located is required for all engineered openings without ICC-ES certification.

Qty	Model	Minimum Opening Required	Engineered Opening Covers	Price per Vent	Cost for Shipping	TOTAL COST
200	1608-F	16"Wide x 8" High	124 sq ft	$59.00	$464.00	$12,264.00

Accepted / Approved as stated herein to all sizes and terms:

X_____

Date: X_____

Non-Returnable & Non-Refundable

Frame: **1-1/4" DEEP, 1" Front Flange**; heavy gauge extruded aluminum sections, minimum .125" thickness
Blades: Heavy gauge extruded aluminum sections, minimum .063" thickness
Construction: Extruded aluminum sections mechanically fastened
Insect/Rodent Screen: Heavy-duty aluminum insect & rodent screen; rear mounted

FLOOD Solutions
FEMA Compliant Engineered Flood Vents

FLOOD SOLUTIONS, LLC.
One Industrial Park Drive
Bldg. 27
Pelham NH, 03076
Toll Free: 1-800-325-9775
In NH: 603-595-5222
Fax: 603-595-4778
www.floodsolutions.com
info@floodsolutions.com

PROJECT:	
CONTRACTOR:	Devonshire Custom Homes
DATE:	8/20/15