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.

SECT	ION A - PROPERTY I	NFOR	WATION		FOR INSUR	ANCE COMPANY USE
A1. Building Owner's Name Jeffery S. & Fonda T. Currier					Policy Num	per:
A2. Building Street Address (incl Box No. 114 Forest Hills Drive	uding Apt., Unit, Suite,	and/or	Bidg. No.) or P.O.	Route and	Company N	AIC Number:
City Redington Shores		1200	State Florida		ZIP Code 33708	
A3. Property Description (Lot an Lot 63, REDINGTON SHORES)					ellas County,	FL
A4. Building Use (e.g., Resident	ial, Non-Residential, A	ddition,	, Accessory, etc.)	Residential		
A5. Latitude/Longitude: Lat. 27	°49'34" L	ong. 82	2°49'37"	Horizontal Datur	n: 🗌 NAD 1	927 × NAD 1983
A6. Attach at least 2 photograph	is of the building if the	Certific	ate is being used to	obtain flood insur	ance.	
A7. Building Diagram Number	7					
A8. For a building with a crawlsp	ace or enclosure(s):					
a) Square footage of crawls	pace or enclosure(s)		sq ft			
b) Number of permanent flo	od openings in the cra	wlspac	e or enclosure(s) w	ithin 1.0 foot above	adjacent gr	ade
c) Total net area of flood op	enings in A8.b	s	q in			-
d) Engineered flood opening	gs? 🗌 Yes 🗌 No)				
A9. For a building with an attach	ed garage:					
a) Square footage of attach	ed garage1,548		sq ft			
b) Number of permanent flo	od openings in the atta	iched g	garage within 1.0 foo	ot above adjacent	grade	7
c) Total net area of flood op		92	sg in			
d) Engineered flood opening	522 52					
ec.	CTION B - FLOOD IN	ICLIDA	NCE DATE MAD	CIDMA INCORMA	TION	
B1. NFIP Community Name & Co		SOINA	B2. County Name		ATION .	B3. State
Town of Regington Shores 1251			Pinellas			Florida
B4. Map/Panel B5, Suffix Number	B6. FIRM Index Date		IRM Panel ffective/	B8. Flood Zone(s		se Flood Elevation(s) ne AO, use Base
12103 C 0179 G	08/18/2009	100	evised Date /2003	AE	Fior 11	od Depth)
B10. Indicate the source of the E		3.37		-		
B11. Indicate elevation datum us	sed for BFE in Item B9	: 🔲 N	GVD 1929 🗵 NA	VD 1988 🔲 O	ther/Source:	
B12. Is the building located in a	Coastal Barrier Resou	rces Sy	ystem (CBRS) area	or Otherwise Prot	ected Area (0	DPA)? ☐ Yes ⊠ No
Designation Date:		BRS	ПОРА			

OMB No. 1660-0008 **ELEVATION CERTIFICATE** 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. Policy Number: 114 Forest Hills Drive City ZIP Code State Company NAIC Number Redington Shores Florida 33708 SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED) C1. Building elevations are based on: Construction Drawings* ☐ Building Under Construction* X 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: SPONGER B, 872 6899 A & B Vertical Datum: NAVD88 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, 16 |X | feet meters b) Top of the next higher floor 17,96 x feet meters c) Bottom of the lowest horizontal structural member (V Zones only) x feet meters d) Attached garage (top of slab) 7 16 |X | feet meters e) Lowest elevation of machinery or equipment servicing the building 15,80 X feet meters (Describe type of equipment and location in Comments) Lowest adjacent (finished) grade next to building (LAG) 5.7 × feet meters g) Highest adjacent (finished) grade next to building (HAG) 7.0 X feet meters h) Lowest adjacent grade at lowest elevation of deck or stairs, including |X | feet meters structural support 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 UNo Check here if attachments. Certifier's Name License Number Michael F. Cornnell 4987 Title Project Surveyor Company Name Echezabal & Associates, Inc. Address 25400 US Hwy 19 N City State ZIP Code Clearwater Florida 33763 Signature Date Telephone 01/03/2017 (727) 796-8740 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) Photos shown herein were taken January 3, 2017. The elevation listed in C2e is to the top of the metal support for the elevated airconditioner. There are seven (16"x16") flood vent openings.

ELEVATION CERTIFICATE

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IMPORTANT: In these spaces, copy the correspond	ing information	from Section A.	FOR INSURANCE	COMPANY USE
Building Street Address (including Apt., Unit, Suite, and	l/or Bldg. No.) or	P.O. Route and Box No.	Policy Number:	
114 Forest Hills Drive	x			
City	State	ZIP Code	Company NAIC N	umber
	Florida	33708		
SECTION E – BUILDING EL FOR ZON	EVATION INFO	RMATION (SURVEY N E A (WITHOUT BFE)	OT REQUIRED)	
For Zones AO and A (without BFE), complete Items E1 complete Sections A, B,and C. For Items E1–E4, use renter meters.	natural grade, if a	valiable. Uneck the meas	mement used. In the	to Rico orny,
E1. Provide elevation information for the following and the highest adjacent grade (HAG) and the lowest a) Top of bottom floor (including basement,	I check the appro adjacent grade (l	priate boxes to show whe _AG).	ther the elevation is al	pove or below
crawispace, or enclosure) is		feet m	eters 🗌 above or [below the HAG.
b) Top of bottom floor (including basement, crawlspace, or enclosure) is		feet m	eters	below the LAG.
E2. For Building Diagrams 6–9 with permanent flood	openings provide	d in Section A Items 8 an	d/or 9 (see pages 1–2	of Instructions),
the next higher floor (elevation C2.b in the diagrams) of the building is		feet [] m		below the HAG.
E3. Attached garage (top of slab) is		[] feet [] m	eters 🔲 above or [below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is			neters 🔲 above or [below the HAG.
E5. Zone AO only: If no flood depth number is availabely floodplain management ordinance? Yes	ole, is the top of t	he bottom floor elevated i own. The local official m	n accordance with the just certify this informa	community's tion in Section G.
SECTION F - PROPERTY OW	VNER (OR OWN	ER'S REPRESENTATIVE) CERTIFICATION	
The property owner or owner's authorized representation community-issued BFE) or Zone AO must sign here.	tivo who complete	es Sections A. B. and F. fr	or Zone A (without a Fl	EMA-issued or my knowledge.
Property Owner or Owner's Authorized Representative				A A A A A A A A A A A A A A A A A A A
Address		City	State	ZIP Code
Signature		Date	Telephone	<u> </u>
Comments	· · · · · · · · · · · · · · · · · · ·			
,				
			☐ Check I	nere if attachments.
1				700 0000 10 10200

ELEVATION CERTIFICATE

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

Dilling Of the Charles of the Charle			FOR INSURANCE	COMPANY USE
Building Street Address (including Apt., Un 114 Forest Hills Drive	it, Suite, and/or Bldg. No.)	or P.O. Route and Box N	lo. Policy Number:	Na Robert Contractor
Dity	Ot-t-	700		
Redington Shores	State Florida	ZIP Code	Company NAIC Nur	mber
		33708		
M 44 40-40-40	CTION G - COMMUNITY I			
The local official who is authorized by law Sections A, B, C (or E), and G of this Eleve used in Items G8–G10. In Puerto Rico only	ation Certificate Complete	the community's floodplathe applicable item(s) ar	ain management ordinance nd sign below. Check the mo	can complete easurement
The information in Section C was engineer, or architect who is authorized at a in the Comments area below.	norized by law to certity ele	ntation that has been sig vation information. (Indic	ned and sealed by a license cate the source and date of	ed surveyor, the elevation
62. A community official completed sor Zone AO.	Section E for a building loca	ated in Zone A (without a	ı FEMA-issued or communi	ty-issued BFE)
93. The following information (Items	G4–G10) is provided for co	ommunity floodplain mar	agement purposes.	
G4. Permit Number	G5. Date Permit Issu	ued	G6. Date Certificate of Compliance/Occupant	cy Issued
37. This permit has been issued for.	New Construction] Substantial Improveme	ent	
 Elevation of as-built lowest floor (included the building:] feet	
G9. BFE or (in Zone AO) depth of flooding	g at the building site:] feet [] meters Datum	
G10. Community's design flood elevation:] feet ☐ meters Datum	
ocal Official's Name		Title		
ommunity Name		Telephone		
Signature		Date		
Comments (including type of equipment an	digartian per C2(a) if an	-Racktay		
orninenta (intoluding type of equipment all	o location, per cz(e), ir app	olicable)		
			Check here	if attachments
			_ STRUCTURE	attabilitionita

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

See Instructions for Item A6.

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Building Street Address (including Apt., Ur 114 Forest Hills Drive	it, Suite, and/or Bldg. No.)	or P.O. Route and Box No.	Policy Number:
City Redington Shores	State Florida	ZIP Code 33708	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 from street

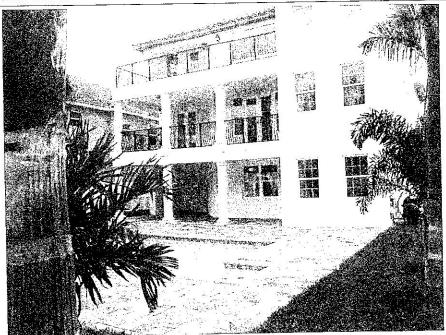


Photo Two

Photo Two Caption Rear view

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

Continuation Page

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

IMPORTANT: In these spaces, copy	FOR INSURANCE COMPANY USE		
Building Street Address (including Ap 114 Forest Hills Drive			Policy Number:
City Redington Shores	State Florida	ZIP Code 33708	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.

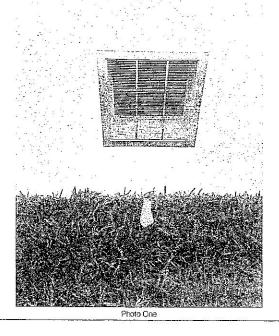


Photo One Caption Flood vent (typical)

Photo Two

Photo Tw

Photo Two Caption

INSTALLATION INSTRUCTIONS

MODELS: FS AND FS-HEX

ICC-ES CERTIFIED - ENGINEERED

FEMA COMPLIANT FLOOD VENTS

What you'll need:

- -1" Concrete/wood/metal screws which is dependent on what type of wall you will be fastening into
- 1" Anchors for concrete wall installation
- Power Drill
- 1/4" Masonry Bit or 1/4" wood drill bit (dependent on what type of wall you will be fastening into)
- Screwdriver
- Hammer
- Levei
- Exterior Caulking
- Flashing, if needed, for an opening with a cavity in the wall (optional)

INSTRUCTIONS:

NOTE: BE SURE THAT <u>BOTTOM</u> OF OPENING IS LESS THAN 12" ABOVE THE ADJACENT GRADE.

Step 1: PROVIDE A CLEAN, SQUARE AND LEVEL ROUGH OPENING

Step 2: APPLY FLASHING AROUND THE INTERIOR OF THE WALL OPENING IF THERE IS A CAVITY IN THE WALL (optional)

Step 3: LAYOUT THE VENT SO THE OPEN AREAS OF THE VENT HAVE A CLEAR OPENING BEHIND THEM.

Step 4: MAKE SURE VENT IS LEVEL

Step 5: MARK HOLES ON WALL AND THEN REMOVE VENT FROM OPENING

FOR CONCRETE WALLS: Use Concrete Screws and Anchors

FOLLOW STEPS 1-5 ABOVE

Step 5: DRILL HOLES 1-1/4"DEEP INTO CONCRETE/BLOCK WALL.

Step 6: FULLY INSERT ANCHORS INTO WALL, TAPPING ANCHORS INTO PLACE USING A HAMMER MAKING SURE

ANCHORS ARE FLUSH TO THE WALL

Step 8: REPLACE VENT INTO OPENING

Step 9: SECURE ALL SCREWS THROUGH HOLES IN VENT INTO ANCHORS SET IN WALL

Step 10: CAULK AROUND PERIMETER OF VENT TO HELP PREVENT WATER FROM SEEPING

BEHIND THE FLANGE FRAME

FOR WOOD WALLS: Use Wood Screws

FOLLOW STEPS 1-5 ABOVE

Step 5: DRILL HOLES 1/2" DEEP INTO THE WOOD WALL

Step 6: REPLACE VENT OVER THE OPENING

Step 7: SECURE ALL SCREWS THROUGH HOLES IN VENT INTO THE WOOD WALL

Step 8: CAULK AROUND PERIMETER OF VENT TO HELP PREVENT WATER FROM SEEPING BEHIND THE FRAME

FOR INSTALLATION INTO DOORS:

FOLLOW STEPS 1-5 ABOVE

Step 5: IF THE DOOR IS NOT A SOLID DOOR, USE ALUMINUM FLASHING AROUND THE PERIMETER OF THE HOLE

Step 6: DRIVE WOOD OR METAL SCREWS THROUGH PREDRILLED HOLES IN VENTS INTO WOOD FRAMING

Step 7: CAULK AROUND PERIMETER OF VENT TO HELP PREVENT WATER FROM SEEPING

BEHIND THE FLANGE FRAME



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



ICC-ES Evaluation Report

ESR-3760

Reissued March 2016

This report is subject to renewal March 2018.

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:

FLOOD SOLUTIONS, LLC
ONE INDUSTRIAL PARK DRIVE
BUILDING 27
PELHAM, NEW HAMPSHIRE 03076
(800) 325-9775
www.floodsolutions.com
info@floodsolutions.com

EVALUATION SUBJECT:

STATIC FLOOD VENTS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2015, 2012 and 2000 International Building Code®
- 2015, 2012 and 2009 International Residential Code®

Property evaluated:

Water flow

2.0 USES

Flood Solutions' static flood vents are used to provide for the equalization of hydrostatic flood forces on exterior walls.

3.0 DESCRIPTION

3.1 General:

Flood Solutions' static flood vents are engineered, permanently open flood vents with no moving parts that automatically allow flood waters to enter and exit enclosed areas. The vents are constructed of aluminum and available in four models. See Table 1 for model designations and sizes. See Figure 1 for illustrations of the flood vents.

3.2 Engineered Opening:

The Flood Solutions static flood vents comply with the design principle noted in Section 2.6.2.2 of ASCE/SEI 24 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, the static flood vents must be installed in accordance with Section 4.0 of this report.

3.3 Ventilation:

Flood Solutions' static flood vents may be used to supply natural ventilation for under-floor ventilation. See Table 1 for net free area for under-floor ventilation provided by each of Flood Solutions' static flood vents.

4.0 DESIGN AND INSTALLATION

The Flood Solutions static flood vents are designed to be installed into walls or 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. In order to comply with the engineered opening design principle noted in Section 2.6.2.2 of ASCE/SEI 24, the vents must be installed as follows:

- With a minimum of two opening on different sides of each enclosed area.
- With a minimum of one vent for the square footage of enclosed area noted in Table 1.
- · Below the base flood elevation.
- With the bottom of the vent located a maximum of 12 inches (305 mm).above grade.

5.0 CONDITIONS OF USE

The static flood vents described in this report comply with, or are 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 static flood vents 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 static flood vents 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 Manufacturer's descriptive literature and installation instructions.
- 6.2 Detail drawings.
- 6.3 Engineering calculations in accordance with ASCE/SEI 24.
- 6.4 Quality documentation in accordance with the ICC-ES Acceptance Criteria for Quality Documentation (AC10), dated June 2014.

7.0 IDENTIFICATION

The Flood Solutions static flood vents recognized in this report must be identified by a label bearing the manufacturer's name (Flood Solutions), the model number, and the evaluation report number (ESR-3760).

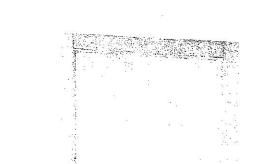


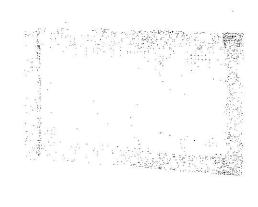


TABLE 1—FLOOD SOLUTIONS STATIC FLOOD VENTS

MODEL	VENT SIZE (Width x Height) (In)	ROUGH OPENING SIZE (Width x Height) (in)	ENCLOSED AREA COVERAGE (ft²)	NET FREE AREA ¹ (in²)
FS-1608	$18^{1}l_{2} \times 10^{1}l_{2}$	16 x 8	97	80.7
FS-1616	$18^{1}/_{2} \times 18^{1}/_{2}$	16 x 16	191	158.2
FS-1412	17 x 14 ¹ / ₂	14 ¹ / ₂ x 12	129	106.7
FS-1608-Hex	$18^{1}/_{2} \times 10^{1}/_{2}$	16 x 8	110	91.4

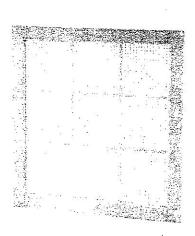
For **Si**: 1 inch = 25.4 mm; 1 ft = 304.8 mm ¹Available for use as under-floor ventilation.



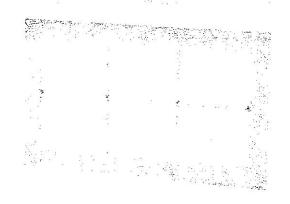


FS-1412

FS-1608_



FS-1616



FS-1608-HEX

FIGURE 1—FLOOD SOLUTIONS STATIC FLOOD VENTS