This section presents detailed instructions for the completion of the National Flood Insurance Program (NFIP) Elevation Certificate and the NFIP Floodproofing Certificates.

NOTE: When determining the lowest floor for rating, refer to the Lowest Floor Guide section of this manual.

#### I. NFIP ELEVATION CERTIFICATE

The NFIP Elevation Certificate (EC) form and instructions were revised effective February 13, 2006. The surveyor, engineer, architect, property owner, or owner's representative is required to provide the square footage of the enclosed area below the lowest elevated floor (including an attached garage) and at least two photographs of the building when completing the EC to obtain flood insurance through the NFIP. This additional information will significantly enhance the agent's and company underwriter's ability to properly rate elevation-rated risks.

The new EC form and instructions (shown on pages CERT 9-24) will be phased in on a voluntary basis until December 31, 2006. Elevations certified on or after January 1, 2007, must be submitted on the new form and must include at least two photographs.

An exception is made to this requirement when the community official completes the old EC with elevation data received by the community before

January 1, 2007. It must be noted in the Comments area of Section G that the community had the data on file before January 1, 2007.

Non-NFIP elevation certification forms certified on or after October 1, 2000, do not satisfy NFIP requirements and cannot be used for rating policies under any circumstances.

The EC is required on Post-FIRM construction, but is optional on Pre-FIRM construction. The EC is required by the NFIP to certify the lowest floor of a building so the policy can be properly rated, as follows (also see pages LFG 1-2):

#### • All Post-FIRM structures

The EC is to be completed by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information when it is required for Zones A1-A30, AE, AH, A (with Base Flood Elevations [BFEs]), V1-V30, VE, and V (with BFEs). Community officials who are authorized by local law or ordinance to provide floodplain management information may also complete this form. For Zones AO and A (without BFEs), a building official, a property owner, or an owner's representative may also provide the information on this certification. Building elevation information may be available through the community official if the community is a CRS participating community.

The lowest adjacent grade and diagram number are required for all new business applications effective on or after October 1, 1997, if the elevation certification date is on or after October 1, 1997.

Pre-FIRM structures rated under Post-FIRM rates

Pre-FIRM construction can be elevation rated using the Post-FIRM EC rates, which are more favorable rates if the lowest floor of the building is at or above the BFE for the community. In most cases, the lowest floor level of a Pre-FIRM building is below the BFE, and it would not benefit the insured to pay the cost for an EC in an attempt to secure a lower rate. The decision to obtain an EC and to request Post-FIRM rating of a Pre-FIRM building is an option of the insured.

• AR and AR Dual Zones

The EC is optional on all Post- and Pre-FIRM construction located in AR and AR dual zones. The decision to obtain an EC and to request Post-FIRM rating is at the discretion of the insured. The EC includes the AR and AR dual zone elevation requirements.

Detailed instructions for completion are provided with the EC.

The producer is to attach the original of the completed EC to the Application. A photocopy is to be forwarded to the policyholder and a copy is retained by the producer.

#### II. USING THE ELEVATION CERTIFICATE: SPECIAL CONSIDERATIONS

#### Section A – Property [Owner] Information

• Section A of the EC includes the building use. This information is helpful in validating the data collected by the insurance agent, and the Flood Insurance Application information.

- On the new EC, latitude, longitude, and related information are optional *only if* the document is being certified by other than a licensed surveyor, engineer, or architect.
- If the new EC is being used to obtain flood insurance, and the certification date is on or after January 1, 2007, the EC must be accompanied by at least two current photographs of the building.
- For any crawl space, enclosure(s), or attached garage, the new EC collects square footage, number of flood openings within 1.0 foot above adjacent grade, and total area of flood openings in square inches. (A parking area located beneath an elevated floor is not considered an attached garage.)

The information found in Section A of the EC is critical, as it relates to the insured property. Should information be missing from Section A (except latitude, longitude, and related information), the certificate must be returned to the surveyor, engineer, architect, or community official who executed the form. These individuals should be encouraged to fully complete Section A to avoid any delay in the issuance of the flood insurance policy.

## Section B – Flood Insurance Rate Map (FIRM) Information

The Flood Insurance Rate Map (FIRM) information includes the following:

- FIRM panel effective date and revised date;
- Source of the BFE or base flood depth;
  - <u>NOTE</u>: The same elevation datum should be used in determining all certification elevations as was used in determining the BFE (i.e., NGVD 1929 or NAVD 1988).
- Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA).
  - <u>NOTE</u>: Refer to the Coastal Barrier Resources System section of this manual for flood insurance coverage eligibility.

# Section C – Building Elevation Information (Survey Required)

Responsibilities for building elevation information are as follows.

• The surveyor, engineer, or architect is required to provide a number of elevations based on the building type selected.

• From the elevations gathered, the insurance agent is required to determine the lowest floor for rating flood insurance.

As it relates to Section C, information found not to be applicable to the property being certified should be marked NA (not applicable) by the surveyor, engineer, or architect. If any part of Section C is left blank, critically review it and contact the surveyor, engineer, or architect who completed the form and your company underwriter with any questions.

Elevation(s) of machinery and equipment servicing the building (e.g., water heater, furnace, a/c compressor, heat pump, water pump) must be provided, regardless of its location, whether inside or outside of the building, elevated on a platform or non-elevated.

The surveyor, engineer, or architect may not be able to gain access to some crawl spaces to shoot the elevation of the crawl space floor. In this instance, Item C2.a on the new EC (C3.a on the old EC) may be left blank and the estimated measurements entered in the Comments area of Section D.

Elevations in Section C are based on feet, except in Puerto Rico, where the metric system is used. The agent must convert any metric elevation readings into feet before calculating the flood insurance premium.

# Section D – Surveyor, Engineer, or Architect Certification

Section D is the surveyor's, engineer's, or architect's certification that the information provided in Sections A, B, and C is representative of the certifier's best efforts to interpret the data available. The surveyor's, engineer's, or architect's signature and identification number are required fields. Some States also may require a seal.

#### Section E – Building Elevation Information (Survey Not Required) for Zone AO and Zone A (Without BFE)

Building Diagram Number (old EC) and the elevation difference between the lowest floor and the lowest adjacent grade (new EC) and highest adjacent grade are required.

For Zone A (without a FEMA-issued or community-issued BFE) and Zone AO, a property owner or owner's authorized representative may complete Sections A, B, and E.

## Section F – Property Owner (or Owner's Representative) Certification

Address and other contact information about the property owner are requested in Section F. The party completing Sections A, B, C (on the old EC, Items C3.h and C3.i only), and E must execute Section F as well.

#### Section G – Community Information (Optional)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance may transfer elevation information found on existing documentation (i.e.. an older elevation certification form, or surveyor letterhead) to Section C of the EC. The local official must then certify this information by fully completing Section G. A statement advising FEMA of this transfer of information must be made in the comment section of the newer EC. Section G may also be used to certify Item E4.

#### III. FLOODPROOFING CERTIFICATE

#### A. Purpose and Eligibility

- In certain circumstances, floodproofing may be permitted as an alternative to elevating to or above the Base Flood Elevation (BFE); however, a floodproofing design certification is required. Certified floodproofing may result in lower rates.
- Non-residential buildings in any community, in all locations except in V-Zones, may be floodproofed in lieu of elevating.
- Residential buildings may be floodproofed only if they have basements, are located in Zones A1-A30, AE, AR, AR Dual, AO, and AH, and only if they are located in communities specifically approved and authorized by FEMA. A current list of approved communities appears on page CERT 4.
- The allowable methods of floodproofing for non-residential buildings differ from those allowed for residential buildings. The specific requirements should be available from the local government.

#### B. Specifications

The specifications for floodproofing ensure that the building is watertight without human intervention, its floodproofed walls will not collapse, and the floor at the base of the floodproofed walls will resist flotation during flooding conditions.

#### C. Rating

In order to be eligible for lower rates, the insured must have a registered professional engineer or architect certify that the floodproofing conforms with the minimum floodproofing specifications of FEMA. This means that the building must be floodproofed to at least 1 foot above the BFE. If floodproofed to 1 foot above the BFE, flood depth, or comparable community approved floodplain management standards, it can then be treated for rating purposes as having a "0" elevation difference from the BFE. This certification must be submitted with the Flood Insurance Application.

To further illustrate, if the building is certified to be floodproofed to 2 feet above the BFE, flood depth, or comparable community approved floodplain management standards, whichever is highest, then it is credited for floodproofing and is to be treated for rating purposes as having a "+1" foot elevation.

See the Rating Section for special rating rules for Zones AO and AH.

#### D. Certification

• Residential Buildings (With Basements)

The Residential Basement Floodproofing Certificate is available for residential buildings with basements located in Zones A1-A30, AE, AR, AR Dual, AO, AH, and A with estimated BFE *and* located in a FEMAapproved community that is listed on the next page. To receive credit for floodproofing, the completed certificate must be submitted.

Non-residential Buildings

A completed Floodproofing Certificate for Non-residential Structures is required for all such buildings in Regular Program communities, located in Zones A1-A30, AE, AR, AR Dual, AO, AH, and A with estimated BFE, in order to receive credit for floodproofing in lieu of elevation.

#### APPROVED COMMUNITIES FOR RESIDENTIAL BASEMENT FLOODPROOFING RATING CREDIT

	STATE/COMMUNITY NAME	EFFECTIVE DATE <sup>1</sup>		STATE/COMMUNITY NAME	EFFECTIVE DATE <sup>1</sup>
	Alaska			New York	
025009	Fairbanks N. Star Borough	2/28/73	360226 360232	Amherst, Town of Clarence, Town of	11/20/78 8/01/00
	Idaho			North Dakota	
160028	Ammon, City of	6/8/90			
	Iowa		380256 380020 385364	Barnes, Township of Casselton, City of Fargo, City of	1/22/82 6/18/81 3/26/75 <sup>2</sup>
190488	Clive, City of	4/24/81	380137	Grafton, City of	5/21/81
190031 190309	Independence, City of La Porte City, City of	9/7/89 6/12/89	380338 380259 380022	Harwood, City of Harwood, Township of Horace, City of	12/19/85 1/22/82 1/22/82
	Kansas		380023	Mapleton, City of	1/22/82 <sup>2</sup>
200484	Colwich, City of	1/17/86	380681 380263	Oxbow, City of Pleasant, Township of	6/1/92 <sup>2</sup> 5/5/83
200323	Derby, City of	2/15/83 <sup>2</sup>	380257	Reed, Township of	1/22/82
200019 200131	Great Bend, City of Halstead, City of	8/10/83 7/8/83	380324 380258	Reiles Acres, City of Stanley, Township of	8/23/82 2/8/82
200215	Lindsborg, City of	11/7/94	380024	West Fargo, City of	6/5/78
200334 200319	Rossville, City of	2/18/92 3/6/86		South Dakata	
00319	Salina, City of Saline County	1/14/86		South Dakota	
200134	Sedgwick, City of	5/19/86 <sup>2</sup>	460044	Madison, City of	8/30/83
	Minnesota			Wisconsin	
270267	Alvarado, City of	2/28/85	550612	Allouez, Village of	1/11/93 <sup>2</sup>
275235 270080	Clay County	3/28/75 8/29/83	550600 550020	Ashwaubenon, Village of	10/27/78 2/21/79 <sup>2</sup>
275236	Dilworth, City of East Grand Forks, City of	5/15/86 <sup>2</sup>	550020	Brown County Depere, City of	10/27/78
275244	Moorhead, City of	2/12/76	550022	Green Bay, City of	10/27/78
270414 270273	Roseau, City of Stephen, City of	7/14/92 5/10/83	550023 550309	Howard, Village of Shiocton, Village of	10/27/78 8/1/98
270273	Warren, City of	9/24/82	550505	Shiocion, village of	0/1/00
	Nebraska				
310069	Fremont, City of	1/25/79			
310103	Grand Island, City of	7/29/80			
310100 310001	Hall County Hastings, City of	2/10/80 7/8/83			
310239	North Bend, City of	10/15/98			
310046	Schuyler, City of	9/17/91			
310039 310104	Sidney, City of Wood River, City of	12/4/84 1/12/82			

<sup>1</sup> Effective date corresponds to the date of the letter from FEMA that granted the community's exception request. <sup>2</sup> The date the community adopted floodproofing ordinances.

	IT OF HOMELAND ENCY MANAGEME nce Program				NTIAL BASEMENT OFING CERTIFIC		See Reverse Side for Paperwork Burden Disclosure	O.M.B. No. 1660-0033 Expires April 30, 2007
For use ON floodproofee	LY in commu d residential	inities w basemen	hich have ts in Speci	been gra ial Flood	nted an exception by F Hazard Areas.	EMA to al	llow the constr	uction of
BUILDING OWNE	R'S NAME						FOR INSURANCE CO	MPANY USE
						POLICY NUM	IBER	
BUILDING STREE	T ADDRESS (Inclu	ding Apt., U	nit, Number)			COMPANYN	IAIC NUMBER	
OTHER DESCRIPT	TION (Lot and Bloc	ck Numbers,	, etc.)					
CITY						STATE		ZIP CODE
			SECTION I-F	LOOD INSU	RANCE RATE MAP (FIRM) INF	ORMATION		
		Provide 1			RM and flood profile (from Flo		Study)	
COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	FIRM ZONE	BASE FLOOD ELEVATION (IN AO ZONES, USE D			ODING SOURCE(S) NG BUILDING
	SECTI	ION II-FLO	DPROOFING	INFORMA	ION (By a Registered Profess	sional Enginee	er or Architect)	
			1	U	Design Elevation Inform			
Buildir (Elevat	ng is floodproof ion datum usec	fed to an e 1 must be	elevation of the same as	that on th	ne FIRM.) · feet NGV	D.		
					feet NG			
(Note:	The floodproof	fing design	n elevation 1	must be at	least one foot above the I	Base Flood E	Elevation (BFE))	
		SECTIO	N III-CERTIFI	CATION (By	a Registered Professional En	gineer or Arc	hitect)	
		Reside	ential Floo	dproofed	Basement Constructio	n Certifica	ition:	
consideration methods of co	of the depth,	velocity, a the floodp	and duratio	on of flood	tructural design specifica ling and the type and per ie used are in accordance	rmeability d	of soils at the sit	e, the design and
					d sanitary facilities, is w assage of water without			fing design eleva-
resu	lting from flo	oding to	the floodp	roofing d	ng hydrostatic and hydr lesign elevation; and ha oofing design elevation	ve been des	loads and the e signed so that r	ffects of buoyancy ninimal damage
• Build	ding design, i	ncluding	the floodp	proofing c	lesign elevation, compli	es with cor	nmunity requir	ements.
I certify that that any false	the informati e statement me	ion on the ay be pun	is certificat aishable by	e represen fine or in	nts my best efforts to inte nprisonment under 18 U	erpret the d J.S. Code S	lata available. 1 Section 1001.	understand
CERTIFIER'S NAM	1E					LICENSE NUM	ABER (or affix Seal)	
TITLE					COMPANY NAME			
ADDRESS					СІТҮ	STATE		ZIP
SIGNATURE						PHONE NO.		DATE
	Copies of thi	s certificate	must be given	to: 1) the c	ommunity official; 2) the insura	nce agent; and	d 3) the building own	er.
FEMA Form 81-78			0					F-200 (05/04)

#### PAPERWORK BURDEN DISCLOSURE NOTICE

FEMA Form 81-78

Public reporting burden for this form is estimated to average 3.35 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number is displayed in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing the burden to: Information Collections Management, U.S. Department of Homeland Security, Emergency Preparedness and Response Directorate, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472, Paperwork Reduction Project (1660-0033). **NOTE: Do not send your completed form to this address.** 

#### U.S. DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY

National Flood Insurance Program

# FLOODPROOFING CERTIFICATE

The floodproofing of non-resi floodproofing design certifica community's floodplain mana FEMA to allow floodproofed that the design complies with	tion is required. This fo gement elevation requ residential basements	orm is to be used uirements or affe . The permitting	I for that certification. Floc ct the insurance rating un of a floodproofed resident	odproofing of a n less the commu	esidential building does not Inity has been issued an exc	alter a ception by
					FOR INSURANCE COMPANY U	ISE
BUILDING OWNER'S NAME					POLICY NUMBER	
STREET ADDRESS (Including Apt.,	Unit, Suite, and/or Bldg. Nu	imber) OR P.O. ROU	TE AND BOX NUMBER		COMPANY NAIC NUMBER	
OTHER DESCRIPTION (Lot and Blo	ck Numbers, etc.)					
CITY				Ş	STATE ZIP CO	DE
	SECTION I	FLOOD INSUF	RANCE RATE MAP (FIR	M) INFORMAT	ION	
Provide the following from the	e proper FIRM:					
COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM INDEX	FIRM ZONE	BASE FLOOD EL (In AO Zones, Us	
SECT	ion II floodproc	DFING INFORM	ATION (By a Registered	Professional En	ngineer or Architect)	
(NOTE: for insurance receive rating credit. premium.) Non-Residential Floodpro I certify that, based up construction are in ad The structure, to walls that are su All structural co	section purposes, the lift the building is flood SECTION III CE ofed Construction ( pon development and coordance with accept ogether with attendant ubstantially impermeal	building's floodpro proofed only to the RTIFICATION (I Certification: Vor review of stru- ted standards of t utilities and sani- ble to the passage	By Registered Profession By Registered Profession ctural design, specification practice for meeting the for itary facilities, is watertight ge of water.	ust be at least or then the building nal Engineer or / ns, and plans for ollowing provision t to the floodproo	ne foot above the Base Floo 's insurance rating will resu Architect) r construction, the design a	nd methods of ted above, with
may be punishable b	nation on this certifica y fine or imprisonment	te represents my t under 18 U.S. C	Code, Section 1001.		e. I understand that any false	e statement
CERTIFIER'S NAME			LICENSE NUMBER (	or Affix Seal)		
TITLE			COMPANY NAME			
ADDRESS			CITY	STATE	ZIP CODE	
SIGNATURE			DATE	PHONE		
Copies should	d be made of this Cert	tificate for: 1) cor	nmunity official, 2) Insura	nce agent/comp	any, and 3) building owner.	
FEMA Form 81-65, Feb 06		Repla	ices all previous editions			F-056 (2/06)

#### FLOOD INSURANCE FLOODPROOFING CERTIFICATE FEMA FORM 81-65

**GENERAL**—This information is provided pursuant to Public Law 96-511 (the Paperwork Reduction Act of 1980, as amended), dated December 11, 1980, to allow the public to participate more fully and meaningfully in the Federal paperwork review process.

AUTHORITY—Public Law 96-511, amended; 44 U.S.C. 3507; and 5 CFR 1320

**PAPERWORK BURDEN DISCLOSURE NOTICE**—The public reporting burden for this form is estimated to be 3.25 hours per response. The burden estimates includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472, Paperwork Reduction Project (1660-0008).

NOTE: Please do not send your completed form to the above address.



NATIONAL FLOOD INSURANCE PROGRAM

# **ELEVATION CERTIFICATE**

AND

**INSTRUCTIONS** 

### **NEW EDITION**

Voluntary-Use Date: February 13, 2006 Mandatory-Use Date: January 1, 2007

#### NATIONAL FLOOD INSURANCE PROGRAM ELEVATION CERTIFICATE

#### PAPERWORK REDUCTION ACT NOTICE

Public reporting burden for the Elevation Certificate is estimated to average 3.5 hours per response. Burden means the time, effort, or financial resources expended by persons to generate, maintain, retain, disclose, or provide information to the Federal Emergency Management Agency (FEMA). You are not required to respond to the collection of information unless a valid OMB control number is displayed in the upper right corner of the form. You may send comments regarding the accuracy of the burden estimate and any suggestions for reducing the burden to: U.S. Department of Homeland Security, Federal Emergency Management Agency, Mitigation Division, 500 C Street SW, Washington DC 20472, Paperwork Reduction Project (1660-0008). NOTE: Do not send your completed form to this address. To obtain or retain benefits under the National Flood Insurance Program (NFIP), you must respond to this collection of information.

#### PURPOSE OF THE ELEVATION CERTIFICATE

The Elevation Certificate is an important administrative tool of the National Flood Insurance Program (NFIP). It is to be used to provide elevation information necessary to ensure compliance with community floodplain management ordinances, to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).

The Elevation Certificate is required in order to properly rate post-FIRM buildings, which are buildings constructed after publication of the Flood Insurance Rate Map (FIRM), located in flood insurance Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO. The Elevation Certificate is not required for pre-FIRM buildings unless the building is being rated under the optional post-FIRM flood insurance rules.

As part of the agreement for making flood insurance available in a community, the NFIP requires the community to adopt a floodplain management ordinance that specifies minimum requirements for reducing flood losses. One such requirement is for the community to obtain the elevation of the lowest floor (including basement) of all new and substantially improved buildings, and maintain a record of such information. The Elevation Certificate provides a way for a community to document compliance with the community's floodplain management ordinance.

Use of this certificate does not provide a waiver of the flood insurance purchase requirement. Only a LOMA or LOMR-F from the Federal Emergency Management Agency (FEMA) can amend the FIRM and remove the Federal mandate for a lending institution to require the purchase of flood insurance. However, the lending institution has the option of requiring flood insurance even if a LOMA/LOMR-F has been issued by FEMA. The Elevation Certificate may be used to support a LOMA or LOMR-F request. Lowest floor and lowest adjacent grade elevations certified by a surveyor or engineer will be required if the certificate is used to support a LOMA or LOMR-F request. A LOMA or LOMR-F request must be submitted with either a completed FEMA MT-EZ or MT-1 package, whichever is appropriate.

This certificate is used only to certify building elevations. A separate certificate is required for floodproofing. Under the NFIP, non-residential buildings can be floodproofed up to or above the Base Flood Elevation (BFE). A floodproofed building is a building that has been designed and constructed to be watertight (substantially impermeable to floodwaters) below the BFE. Floodproofing of residential buildings is not permitted under the NFIP unless FEMA has granted the community an exception for residential floodproofed basements. The community must adopt standards for design and construction of floodproofed basements before FEMA will grant a basement exception. For both floodproofed non-residential buildings and residential floodproofed basements in communities that have been granted an exception by FEMA, a floodproofing certificate is required.

Additional guidance can be found in the FEMA Floodplain Management Bulletin about using the Elevation Certificate, available on FEMA's website at <u>www.fema.gov/fima/fpmbul.shtm</u>. Click on "FEMA 467-1 Elevation Certificate Cover and Bulletin."

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

#### ELEVATION CERTIFICATE

OMB No. 1660-0008 Expires February 28, 2009

National Flood Insurance Program Important: Read the instru	ctions on pages 1-8.	
SECTION A - PROPER	TY INFORMATION	For Insurance Company Use:
A1. Building Owner's Name		Policy Number
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Ro	ute and Box No.	Company NAIC Number
City	itate	ZIP Code
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Descri	ption, etc.)	
<ul> <li>A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)</li> <li>A5. Latitude/Longitude: Lat Long</li> <li>A6. Attach at least 2 photographs of the building if the Certificate is being used to ob A7. Building Diagram Number</li> <li>A8. For a building with a crawl space or enclosure(s), provide: <ul> <li>a) Square footage of crawl space or enclosure(s)</li> <li>b) No. of permanent flood openings in the crawl space or enclosure(s)</li> <li>c) Total net area of flood openings in A8.b</li> </ul> </li> </ul>	Horizontal tain flood insurance. A9. For a building with an att a) Square footage of att b) No. of permanent flow walls within 1.0 foot a	Datum: NAD 1927 NAD 1983 ached garage, provide: tached garage sq ft od openings in the attached garage above adjacent grade d openings in A9.b sq in
SECTION B - FLOOD INSURANCE RAT	E MAP (FIRM) INFORMATIO	NC
B1. NFIP Community Name & Community Number B2. County Name		B3. State
B4. Map/Panel Number B5. Suffix B6. FIRM Index B7. FIRM Date Effective/Re		B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
	therwise Protected Area (OPA)? OPA RMATION (SURVEY REQUI ding Under Construction*	Yes No
<ul> <li>*A new Elevation Certificate will be required when construction of the building is c</li> <li>C2. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR below according to the building diagram specified in Item A7.</li> <li>Benchmark Utilized</li></ul>	, AR/A, AR/AE, AR/A1-A30, AR/	AH, AR/AO. Complete Items C2.a-g
Conversion/Comments		
a) Top of bottom floor (including basement, crawl space, or enclosure floor)	Check the measur	ement used. eters (Puerto Rico only)
<ul> <li>b) Top of the next higher floor</li> <li>c) Bottom of the lowest horizontal structural member (V Zones only)</li> <li>d) Attached garage (top of slab)</li> <li>c) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment in Comments)</li> <li>f) Lowest adjacent (finished) grade (LAG)</li> <li>g) Highest adjacent (finished) grade (HAG)</li> </ul>	feet m feet m feet m feet m feet m	eters (Puerto Rico only) eters (Puerto Rico only)
SECTION D - SURVEYOR, ENGINEER, OI	R ARCHITECT CERTIFICAT	ION
This certification is to be signed and sealed by a land surveyor, engineer, or architect information. I certify that the information on this Certificate represents my best efforts I understand that any false statement may be punishable by fine or imprisonment under Check here if comments are provided on back of form.	authorized by law to certify elevents to interpret the data available.	
Title Company Name		
Address City Sta	te ZIP Code	
Signature Date Tele	phone	

FEMA Form 81-31, February 2006

See reverse side for continuation.

Replaces all previous editions

	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
City	State ZIP Code	e Company NAIC Number
SECTION	D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION	I (CONTINUED)
Copy both sides of this Elevation Certi	ficate for (1) community official, (2) insurance agent/company, and (3) build	ling owner.
Comments		
Signature	Date	
	VATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE	
	omplete Items E1-E5. If the Certificate is intended to support a LOMA or LC grade, if available. Check the measurement used. In Puerto Rico only, ent	
	r the following and check the appropriate boxes to show whether the elevati	on is above or below the highest adjacent
grade (HAG) and the lowest adja a) Top of bottom floor (including	basement, crawl space, or enclosure) is feet meters	above or below the HAG.
b) Top of bottom floor (including	basement, crawl space, or enclosure) is feet feet meters	above or below the LAG.
E2. For Building Diagrams 6-8 with p (elevation C2.b in the diagrams)	of the building is feet meters above or b	
E3. Attached garage (top of slab) is		
	d/or equipment servicing the building is feet 🗌 meters	
	number is available, is the top of the bottom floor elevated in accordance w Unknown. The local official must certify this information in Section G.	vith the community's floodplain manageme
	N F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) C	A - Mark 1997 - X
or Zone AO must sign here. The state	zed representative who completes Sections A, B, and E for Zone A (without ements in Sections A, B, and E are correct to the best of my knowledge.	i a FEIVIA-ISSUED OF COMMUNITY-ISSUED BF
Property Owner's or Owner's Authoriz	eu representative s Name	
Address	City S	tate ZIP Code
Signature	Date To	elephone
Comments		
		Check here if attachr
	SECTION G - COMMUNITY INFORMATION (OPTIONAL)	
	w or ordinance to administer the community's floodplain management ordin aplete the applicable item(s) and sign below. Check the measurement used	
	was taken from other documentation that has been signed and sealed by a	
is authorized by law to certify	elevation information. (Indicate the source and date of the elevation data in	the Comments area below.)
	ed Section E for a building located in Zone A (without a FEMA-issued or con	nmunity-issued BFE) or Zone AO.
	ms G4G9.) is provided for community floodplain management purposes.	
34. Permit Number	G5. Date Permit Issued G6. Date Certificate O	f Compliance/Occupancy Issued
	New Construction Substantial Improvement	
8. Elevation of as-built lowest floor (in		eters (PR) Datum
9. BFE or (in Zone AO) depth of floodi	ing at the building site: feet L me	eters (PR) Datum
Local Official's Name	Title	
Community Name	Telephone	
Signature	Date	
Comments		
		Check here if attachr
EMA Form 81-31, February 2006		Replaces all previous edi

**CERT 12** 

# Building Photographs See Instructions for Item A6.

			For Insurance Company U
uilding Street Address (inclu	ding Apt., Unit, Suite, and/or Bldg. No.) or F	P.O. Route and Box No.	Policy Number
ty	State	ZIP Code	Company NAIC Number
instructions for Item A6.	icate to obtain NFIP flood insurance, af Identify all photographs with: date take View." If submitting more photographs	n; "Front View" and "Rear V	iew"; and, if required, "Rig

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#### Building Photographs Continuation Page

Continuation Page	For Insurance Company Use:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.	Policy Number
City State ZIP Code	Company NAIC Number
If submitting more photographs than will fit on the preceding page, affix the additional photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View"	otographs below. Identify all and "Left Side View."

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#### INSTRUCTIONS FOR COMPLETING THE ELEVATION CERTIFICATE

The Elevation Certificate is to be completed by a land surveyor, engineer, or architect who is authorized by law to certify elevation information information is required for Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, or AR/AO. Community officials who are authorized by law or ordinance to provide floodplain management information may also complete this form. For Zones AO and A (without BFE), a community official, a property owner, or an owner's representative may provide information on this certificate, unless the elevations are intended for use in supporting a request for a LOMA or LOMR-F. Certified elevations must be included if the purpose of completing the Elevation Certificate is to obtain a LOMA or LOMR-F.

The property owner, the owner's representative, or local official who is authorized by law to administer the community floodplain ordinance can complete Section A and Section B. The partially completed form can then be given to the land surveyor, engineer, or architect to complete Section C. The land surveyor, engineer, or architect should verify the information provided by the property owner or owner's representative to ensure that this certificate is complete.

In Puerto Rico only, elevations for building information and flood hazard information may be entered in meters.

#### SECTION A – PROPERTY INFORMATION

Items A1.-A4. This section identifies the building, its location, and its owner. Enter the name(s) of the building owner(s), the building's complete street address, and the lot and block numbers. If the building's address is different from the owner's address, enter the address of the building being certified. If the address is a rural route or a Post Office box number, enter the lot and block numbers, the tax parcel number, the legal description, or an abbreviated location description based on distance and direction from a fixed point of reference. For the purposes of this certificate, "building" means both a building and a manufactured (mobile) home.

A map may be attached to this certificate to show the location of the building on the property. A tax map, FIRM, or detailed community map is appropriate. If no map is available, provide a sketch of the property location, and the location of the building on the property. Include appropriate landmarks such as nearby roads, intersections, and bodies of water. For building use, indicate whether the building is residential, non-residential, an addition to an existing residential or non-residential building, an accessory building (e.g., garage), or other type of structure. Use the Comments area of the appropriate section if needed, or attach additional comments.

Item A5. Provide latitude and longitude coordinates for the center of the front of the building. Use either decimal degrees (e.g., 39.5043°, -110.7585°) or degrees, minutes, seconds (e.g., 39° 30' 15.5", -110° 45' 30.7") format. If decimal degrees are used, provide coordinates to at least 4 decimal places or better. When using degrees, minutes, seconds, provide seconds to at least 1 decimal place or better. The latitude and longitude coordinates must be accurate within 66 feet. If the Elevation Certificate is being certified by other than a licensed surveyor, engineer, or architect, this information is not required. Provide the type of datum used to obtain the latitude and longitude. FEMA prefers the use of NAD 1983.

Item A6. If the Elevation Certificate is being used to obtain flood insurance through the NFIP, the certifier must provide at least two photographs showing the front and rear of the building taken within 90 days from the date of certification. The photographs must be taken with views confirming the building description and diagram number provided in Section A. If the building has split-level or multi-level areas, provide at least two additional photographs showing side views of the building. All photographs must be in color and measure at least 3"x3". Digital photographs are acceptable.

Item A7. Select the diagram on pages 7-8 that best represents the building. Then enter the diagram number and use the diagram to identify and determine the appropriate elevations requested in Items C2.a-g. If you are unsure of the correct diagram, select the diagram that most closely resembles the building being certified.

Item A8.a Provide the square footage of the crawl space or enclosure(s) below the lowest elevated floor of an elevated building with or without permanent flood openings. Take the measurement from the outside of the crawl space or enclosure(s). Examples of elevated buildings constructed with crawl space and enclosure(s) are shown in Diagrams 6-8 on page 8. Diagram 2 or 4 should be used for a building constructed with a crawl space floor that is below the exterior grade on all sides.

Items A8.b-c Enter in Item A8.b the number of permanent flood openings in the crawl space or enclosure(s) walls that are no higher than 1.0 foot above the adjacent grade. Estimate the total net area of all such permanent flood openings in square inches, excluding any bars, louvers, or other covers of the permanent flood openings, and enter the total in Item A8.c. If the net

area cannot be reasonably estimated, provide the size of the flood openings without consideration of any covers and indicate in the Comments area the type of cover that exists in the flood openings. If the crawl space or enclosure(s) walls have no permanent openings within 1.0 foot above adjacent grade, enter "0" (zero) in Items A8.b-c.

Item A9.a Provide the square footage of the attached garage with or without permanent flood openings. Take the measurement from the outside of the garage.

Items A9.b-c Enter in Item A9.b the number of permanent flood openings in the attached garage that are no higher than 1.0 foot above the adjacent grade. This includes any openings that are in the garage door that are no higher than 1.0 foot above the adjacent grade. Estimate the total <u>net</u> area of all such permanent flood openings in square inches and enter the total in Item A9.c. If the garage has no permanent flood openings within 1.0 foot above adjacent grade, enter "0" (zero) in Items A9.b-c.

#### SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Complete the Elevation Certificate on the basis of the FIRM in effect at the time of the certification.

The information for Section B is obtained by reviewing the FIRM panel that includes the building's location. Information about the current FIRM is available from the Federal Emergency Management Agency (FEMA) by calling 1-800-358-9616. If a Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR-F) has been issued by FEMA, please provide the letter date and case number in the Comments area of Section D or Section G, as appropriate.

For a building in an area that has been annexed by one community but is shown on another community's FIRM, enter the community name and 6-digit number of the annexing community in Item B1, the name of the new county in Item B2, and the FIRM index date for the annexing community in Item B6. Enter information from the actual FIRM panel that shows the building location, even if it is the FIRM for the previous jurisdiction, in Items B4, B5, B7, B8, and B9.

Item B1. NFIP Community Name & Community Number. Enter the complete name of the community in which the building is located and the associated 6-digit community number. For a newly incorporated community, use the name and 6-digit number of the new community. Under the NFIP, a "community" is any State or area or political subdivision thereof, or any Indian tribe or authorized native organization, that has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction. To determine the current community number, see the NFIP *Community Status Book*, available on FEMA's web site at <a href="http://www.fema.gov/fema/csb.shtm">http://www.fema.gov/fema/csb.shtm</a>, or call 1-800-358-9616.

Item B2. County Name. Enter the name of the county or counties in which the community is located. For an unincorporated area of a county, enter "unincorporated area." For an independent city, enter "independent city."

Item B3. State. Enter the 2-letter state abbreviation (for example, VA, TX, CA).

Items B4.-B5. Map/Panel Number and Suffix. Enter the 10-character "Map Number" or "Community Panel Number" shown on the FIRM where the building or manufactured (mobile) home is located. For maps in a county-wide format, the sixth character of the "Map Number" is the letter "C" followed by a four-digit map number. For maps not in a county-wide format, enter the "Community Panel Number" shown on the FIRM.

Item B6. FIRM Index Date. Enter the effective date or the map revised date shown on the FIRM Index.

Item B7. FIRM Panel Effective/Revised Date. Enter the map effective date or the map revised date shown on the FIRM panel. This will be the latest of all dates shown on the map. The current FIRM panel effective date can be determined by calling 1-800-358-9616.

Item B8. Flood Zone(s). Enter the flood zone, or flood zones, in which the building is located. All flood zones containing the letter "A" or "V" are considered Special Flood Hazard Areas. The flood zones are A, AE, A1-A30, V, VE, V1-V30, AH, AO, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO. Each flood zone is defined in the legend of the FIRM panel on which it appears.

Item B9. Base Flood Elevation(s). Using the appropriate Flood Insurance Study (FIS) Profile, Floodway Data Table, or FIRM panel, locate the property and enter the BFE (or base flood depth) of the building site. If the building is located in more than one flood zone in Item B8, list all appropriate BFEs in Item B9. BFEs are shown on a FIRM or FIS Profile for Zones A1-A30, AE, AH, V1-V30, VE, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO; flood depth numbers are shown for Zone AO. Use the AR BFE if the building is located in any of Zones AR/A, AR/AE, AR/A1-A30, AR/AH, or AR/AO. In A or V zones where BFEs are not provided on the FIRM, BFEs may be available from another source. For example, the community may have established BFEs or obtained BFE data from other sources for the building site. For subdivisions and other developments of more than 50 lots or 5 acres, establishment of BFEs is required by the community's floodplain management ordinance. If a BFE is obtained from another source, enter the BFE in Item B9. In an A Zone where BFEs are not available, complete Section E and enter N/A for Section B, Item B9. Enter the BFE to the nearest tenth of a foot (nearest tenth of a meter, in Puerto Rico).

Item B10. Indicate the source of the BFE that you entered in Item B9. If the BFE is from a source other than FIS Profile, FIRM, or community, describe the source of the BFE.

Item B11. Indicate the elevation datum to which the elevations on the applicable FIRM are referenced as shown on the map legend. The vertical datum is shown in the Map Legend and/or the Notes to Users on the FIRM.

Item B12. Indicate whether the building is located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA). (OPAs are portions of coastal barriers that are owned by Federal, State, or local governments or by certain nonprofit organizations and used primarily for natural resources protection.) Federal flood insurance is prohibited in designated CBRS areas or OPAs for buildings or manufactured (mobile) homes built or substantially improved after the date of the CBRS or OPA designation. For the first CBRS designations, that date is October 1, 1983. An information sheet explaining CBRS areas and OPAs may be obtained on FEMA's web site at <a href="http://www.fema.gov/fhm/fmc\_cbrs.shtm">http://www.fema.gov/fhm/fmc\_cbrs.shtm</a>.

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

Complete Section C if the building is located in any of Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, or AR/AO, or if this certificate is being used to support a request for a LOMA or LOMR-F. If the building is located in Zone AO or Zone A (without BFE), complete Section E instead. To ensure that all required elevations are obtained, it may be necessary to enter the building (for instance, if the building has a basement or sunken living room, split-level construction, or machinery and equipment).

Surveyors may not be able to gain access to some crawl spaces to shoot the elevation of the crawl space floor. If access to the crawl space is limited or cannot be gained, follow one of these procedures.

- Use a yardstick or tape measure to measure the height from the floor of the crawl space to the "next higher floor," and then subtract the crawl space height from the elevation of the "next higher floor." If there is no access to the crawl space, use the exterior grade next to the structure to measure the height of the crawl space to the "next higher floor."
- Contact the local floodplain administrator of the community in which the building is located. The community may have documentation of the elevation of the crawl space floor as part of the permit issued for the building.
- If the property owner has documentation or knows the height of the crawl space floor to the next higher floor, try to verify this by looking inside the crawl space through any openings or vents.

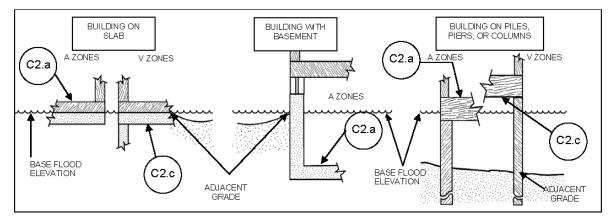
In all three cases, provide the elevation in the Comments area of Section D on the back of the form and a brief description of how the elevation was obtained.

Item C1. Indicate whether the elevations to be entered in this section are based on construction drawings, a building under construction, or finished construction. For either of the first two choices, a post-construction Elevation Certificate will be required when construction is complete. If the building is under construction, include only those elevations that can be surveyed in Items C2.a-g. Use the Comments area of Section D to provide elevations obtained from the construction plans or drawings. Select "Finished Construction" only when all machinery and/or equipment such as furnaces, hot water heaters, heat pumps, air conditioners, and elevators and their associated equipment have been installed and the grading around the building is completed.

Item C2. A field survey is required for Items C2.a-g. Provide the benchmark utilized, the vertical datum for that benchmark, and any datum conversion necessary. Most control networks will assign a unique identifier for each benchmark. For example, the National Geodetic Survey uses the Permanent Identifier (PID). For the benchmark utilized, provide the PID or other

unique identifier assigned by the maintainer of the benchmark. Also provide the vertical datum for the benchmark elevation. Show the conversion from the field survey datum used if it differs from the datum used for the BFE entered in Item B9 and indicate the conversion software used. All elevations for the certificate, including the elevations for Items C2.a-g, must be referenced to the datum on which the BFE is based. Show the datum conversion, if applicable, in this section or in the Comments area of Section D. For property experiencing ground subsidence, the most recent reference mark elevations must be used for determining building elevations. However, when subsidence is involved, the BFE should not be adjusted. Enter elevations in Items C2.a-g to the nearest tenth of a foot (nearest tenth of a meter, in Puerto Rico).

Items C2.a-d Enter the building elevations (excluding the attached garage) indicated by the selected building diagram (Item A7.) in Items C2.a-c. If there is an attached garage, enter the elevation for top of attached garage slab in Item C2.d. (Because elevation for top of attached garage slab is self-explanatory, attached garages are not illustrated in the diagrams.) If the building is located in a V zone on the FIRM, complete Item C2.c. If the flood zone cannot be determined, enter elevations for all of Items C2.a-g. For buildings in A zones, elevations a, b, d, and e should be measured at the top of the floor. For buildings in V zones, elevation c must be measured at the bottom of the lowest horizontal structural member of the floor (see drawing below). For buildings elevated on a crawl space, Diagram 8, enter the elevation of the top of the crawl space floor in Item C2.a, whether or not the crawl space has permanent flood openings (flood vents). *If any item does not apply to the building, enter "N/A" for not applicable.* 



Item C2.e Enter the lowest platform elevation of at least one of the following machinery and equipment items: elevators and their associated equipment, furnaces, hot water heaters, heat pumps, and air conditioners in an attached garage or enclosure or on an open utility platform that provides utility services for the building. Note that elevations for these specific machinery and equipment items are required in order to rate the building for flood insurance. Local floodplain management officials are required to ensure that <u>all</u> machinery and equipment servicing the building are protected from flooding. Thus, local officials may require that elevation information for all machinery and equipment, including ductwork, be documented on the Elevation Certificate. If the machinery and/or equipment is mounted to a wall, pile, etc., enter the platform elevation of the machinery and/or equipment type in the Comments area of Section D or Section G, as appropriate. *If this item does not apply to the building, enter "N/A" for not applicable.* 

**Items C2.f-g** Adjacent grade is defined as the elevation of the ground, sidewalk, patio slab, or deck support immediately next to the building. If the certificate is to be used to support a request for a LOMA or LOMR-F, provide in the Comments area the lowest adjacent grade elevation measured at the deck support or stairs if that elevation is lower than the building's lowest adjacent grade. For Zone AO, use the natural grade elevation, if available. This measurement must be to the nearest tenth of a foot (nearest tenth of a meter, in Puerto Rico) if this certificate is being used to support a request for a LOMA or LOMR-F.

#### SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

Complete as indicated. This section of the Elevation Certificate may be signed by only a land surveyor, engineer, or architect who is authorized by law to certify elevation information. Place your license number, your seal (as allowed by the State licensing board), your signature, and the date in the box in Section D. You are certifying that the information on this certificate represents your best efforts to interpret the data available and that you understand that any false statement may be punishable

by fine or imprisonment under 18 U.S. Code, Section 1001. Use the Comments area of Section D, on the back of the certificate, to provide datum, elevation, or other relevant information not specified on the front.

## SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO & ZONE A (WITHOUT BFE)

Complete Section E if the building is located in Zone AO or Zone A (without BFE). Otherwise, complete Section C instead. Explain in the Section F Comments area if the measurement provided under Items E1.- E4. is based on the "natural grade."

Items E1.a and b Enter in Item E1.a the height to the nearest tenth of a foot (tenth of a meter in Puerto Rico) of the top of the bottom floor (as indicated in the applicable diagram) above or below the highest adjacent grade (HAG). Enter in Item E1.b the height to the nearest tenth of a foot (tenth of a meter in Puerto Rico) of the top of the bottom floor (as indicated in the applicable diagram) above or below the lowest adjacent grade (LAG). For buildings in Zone AO, the community's floodplain management ordinance requires the lowest floor of the building be elevated above the highest adjacent grade at least as high as the depth number on the FIRM. Buildings in Zone A (without BFE) may qualify for a lower insurance rate if an engineered BFE is developed at the site.

Item E2. For Building Diagrams 6-8 with permanent flood openings (see page 8), enter the height to the nearest tenth of a foot (tenth of a meter in Puerto Rico) of the next higher floor or elevated floor (as indicated in the applicable diagram) above or below the highest adjacent grade (HAG).

Item E3. Enter the height to the nearest tenth of a foot (tenth of a meter in Puerto Rico), in relation to the highest adjacent grade next to the building, for the top of attached garage slab. (Because elevation for top of attached garage slab is self-explanatory, attached garages are not illustrated in the diagrams.) If this item does not apply to the building, enter "N/A" for not applicable.

Item E4. Enter the height to the nearest tenth of a foot (tenth of a meter in Puerto Rico), in relation to the highest adjacent grade next to the building, of the platform elevation that supports the machinery and/or equipment servicing the building. Indicate machinery/equipment type in the Comments area of Section F. If this item does not apply to the building, enter "N/A" for not applicable.

Item E5. For those communities where this base flood depth is not available, the community will need to determine whether the top of the bottom floor is elevated in accordance with the community's floodplain management ordinance.

#### SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

Complete as indicated. This section is provided for certification of measurements taken by a property owner or property owner's representative when responding to Sections A, B, and E. The address entered in this section must be the actual mailing address of the property owner or property owner's representative who provided the information on the certificate.

#### SECTION G - COMMUNITY INFORMATION (OPTIONAL)

Complete as indicated. The community 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. Section C may be filled in by the local official as provided in the instructions below for Item G1. If the authorized community official completes Sections C, E, or G, complete the appropriate item(s) and sign this section.

Check Item G1. if Section C is completed with elevation data from other documentation, including elevations obtained from the Community Rating System Elevation Software, 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 of the elevation data and the date obtained in the Comments area of Section G. If you are both a community official and a licensed land surveyor, engineer, or architect authorized by law to certify elevation information, and you performed the actual survey for a building in Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/A1-A30, AR/AE, AR/AH, or AR/AO, you must also complete Section D.

Check Item G2. if information is entered in Section E by the community for a building in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

Check Item G3. if the information in Items G4.-G9. has been completed for community floodplain management purposes to document the as-built lowest floor elevation of the building. Section C of the Elevation Certificate records the elevation of various building components but does not determine the lowest floor of the building or whether the building, as constructed, complies with the community's floodplain management ordinance. This must be done by the community. Items G4.-G9. provide a way to document these determinations.

Item G4. Permit Number. Enter the permit number or other identifier to key the Elevation Certificate to the permit issued for the building.

Item G5. Date Permit Issued. Enter the date the permit was issued for the building.

Item G6. Date Certificate of Compliance/Occupancy Issued. Enter the date that the Certificate of Compliance or Occupancy or similar written official documentation of as-built lowest floor elevation was issued by the community as evidence that all work authorized by the floodplain development permit has been completed in accordance with the community's floodplain management laws or ordinances.

Item G7. New Construction or Substantial Improvement. Check the applicable box. "Substantial Improvement" means any reconstruction, rehabilitation, addition, or other improvement of a building, the cost of which equals or exceeds 50 percent of the market value of the building before the start of construction of the improvement. The term includes buildings that have incurred substantial damage, regardless of the actual repair work performed.

Item G8. As-built lowest floor elevation. Enter the elevation of the lowest floor (including basement) when the construction of the building is completed and a final inspection has been made to confirm that the building is built in accordance with the permit, the approved plans, and the community's floodplain management laws or ordinances. Indicate the elevation datum used.

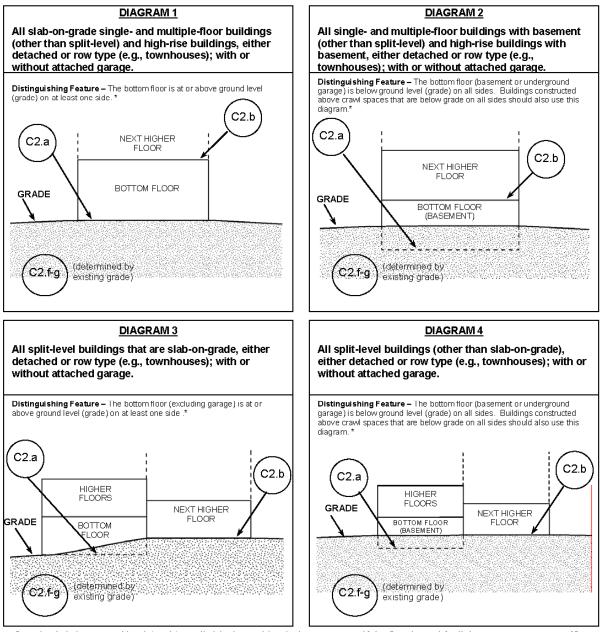
Item G9. BFE. Using the appropriate FIRM panel, FIS Profile, or other data source, locate the property and enter the BFE (or base flood depth) of the building site. Indicate the elevation datum used.

Enter your name, title, and telephone number, and the name of the community. Sign and enter the date in the appropriate blanks.

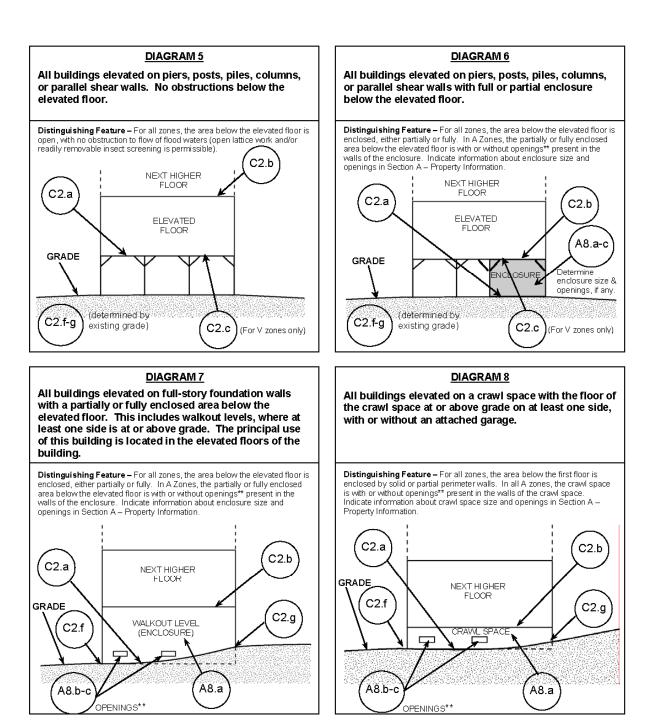
#### **BUILDING DIAGRAMS**

The following eight 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 crawl space 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-g.

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).



\* 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.



\*\* An "opening" is defined as a permanent opening in a wall that allows for the free passage of water automatically in both directions without human intervention. Under the NFIP, a minimum of two openings is required for enclosures or crawl spaces with a total net area of not less than one square inch for every square foot of area enclosed. Each opening must be on different sides of the enclosed area. If a building has more than one enclosed area, each area must have openings on exterior walls to allow floodwater to directly enter. The bottom of the openings must be no higher than one foot above the grade underneath the flood vents. Alternatively, you may submit a certification by a registered professional engineer or architect that the design will allow for the automatic equalization of hydrostatic flood forces on exterior walls. A window, a door, or a garage door is not considered an opening.



NATIONAL FLOOD INSURANCE PROGRAM

# **ELEVATION CERTIFICATE**

AND

INSTRUCTIONS

**OLD EDITION** 

#### NATIONAL FLOOD INSURANCE PROGRAM ELEVATION CERTIFICATE

#### PAPERWORK BURDEN DISCLOSURE NOTICE

#### FEMA Form 81-31

The public reporting burden for this form is estimated to be 3.0 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472, Paperwork Reduction Project (3067-0077). NOTE: Please do not send your completed form to the above address.

#### PURPOSE OF THE ELEVATION CERTIFICATE

The Elevation Certificate is an important administrative tool of the National Flood Insurance Program (NFIP). It is to be used to provide elevation information necessary to ensure compliance with community floodplain management ordinances, to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment or Revision (LOMA or LOMR-F).

The Elevation Certificate is required in order to properly rate post-FIRM buildings, which are buildings constructed after publication of the Flood Insurance Rate Map (FIRM), for flood insurance Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO. The Elevation Certificate is not required for pre-FIRM buildings unless the building is being rated under the optional post-FIRM flood insurance rules.

As part of the agreement for making flood insurance available in a community, the NFIP requires the community to adopt a floodplain management ordinance that specifies minimum requirements for reducing flood losses. One such requirement is for the community to obtain the elevation of the lowest floor (including basement) of all new and substantially improved buildings and maintain a record of such information. The Elevation Certificate provides a way for a community to comply with this requirement.

Use of this certificate does not provide a waiver of the flood insurance purchase requirement. Only a LOMA or LOMR-F from the Federal Emergency Management Agency (FEMA) can amend the FIRM and remove the Federal mandate for a lending institution to require the purchase of flood insurance. However, the lending institution has the option of requiring flood insurance even if a LOMA/LOMR-F has been issued by FEMA. The Elevation Certificate may be used to support a LOMA or LOMR-F request. Lowest floor and lowest adjacent grade elevations certified by a surveyor or engineer will be required if the certificate is used to support a LOMA or LOMR-F request.

This certificate is used only to certify building elevations. A separate certificate is required for floodproofing. Under the NFIP, non-residential buildings can be floodproofed up to or above the Base Flood Elevation (BFE). A floodproofed building is a building that has been designed and constructed to be watertight (substantially impermeable to floodwaters) below the BFE. Floodproofing of residential buildings is not permitted under the NFIP unless FEMA has granted the community an exception for residential floodproofed basements. The community must adopt standards for design and construction of floodproofed basements before FEMA will grant a basement exception. For both floodproofed non-residential buildings and residential floodproofed basements in communities that have been granted an exception by FEMA, a floodproofing certificate is required.

#### FEDERAL EMERGENCY MANAGEMENT AGENCY NATIONAL FLOOD INSURANCE PROGRAM

O.M.B. No. 3067-0077 Expires December 31, 2005

	ELEVA	TION CERTIFICA	TE	
	Important: Re	ad the instructions on pag	jes 1 - 7.	
	SECTION A - P	ROPERTY OWNER INFORMA	TION	For Insurance Company Use:
BUILDING OWNER'S NAME				Policy Number
BUILDING STREET ADDRESS (Including	Apt., Unit, Suite, and/o	r Bldg. No.) OR P.O. ROUTE AND	BOX NO.	Company NAIC Number
CITY		STATE		ZIP CODE
PROPERTY DESCRIPTION (Lot and Block	k Numbers, Tax Parcel	Number, Legal Description, etc.)		
BUILDING USE (e.g., Residential, Non-res	idential, Addition, Acce	ssory, etc. Use a Comments area,	if necessary.)	
LATITUDE/LONGITUDE (OPTIONAL) ( ##° - ##' - ##.##" or ##.#####")	HORIZONTA		GPS (Type):   USGS Quad Map	>    Other
SEC	TION B - FLOOD IN	SURANCE RATE MAP (FIRM	I) INFORMATION	l
B1. NFIP COMMUNITY NAME & COMMUN		32. COUNTY NAME		B3. STATE
B4. MAP AND PANEL B5. SUFFIX NUMBER	B6. FIRM INDEX DATE	B7. FIRM PANEL EFFECTIVE/REVISED DATE	B8. FLOOD ZONE(S)	B9. BASE FLOOD ELEVATION(S) (Zone AO, use depth of flooding)
B10. Indicate the source of the Base Field [] FIS Profile [] FIRM B11. Indicate the elevation datum used B12. Is the building located in a Coasta Designation Date:	[  Community for the BFE in B9: [_	Determined  _  Other (De _  NGVD 1929  _  NAVD 198	scribe): 88    Other (De	
SECTIO	ON C - BUILDING E	LEVATION INFORMATION (S	URVEY REQUIR	ED)
<ul> <li>*A new Elevation Certificate will be</li> <li>C2. Building Diagram Number (Spages 6 and 7. If no diagram accures C3. Elevations – Zones A1-A30, AE, AF Complete Items C3.a-i below accore the datum used for the BFE in Section calculation. Use the space provide Datum Conversion Elevation reference mark used a) Top of bottom floor (including b) Top of next higher floor</li> <li>c) Bottom of lowest horizontal st d) Attached garage (top of slab)</li> <li>e) Lowest elevation of machiner servicing the building (Description of the building (Description of the building (The Section of the Section of the building (Description of the building (The Section of</li></ul>	Select the building dia rately represents the H, A (with BFE), VE, rding to the building of tion B, convert the da d or the Comments a /Comments	agram most similar to the buildi building, provide a sketch or p V1-V30, V (with BFE), AR, AR/ diagram specified in Item C2. S atum to that used for the BFE. S area of Section D or Section G, _ Does the elevation reference ure)	ng for which this of hotograph.) A, AR/AE, AR/A1 tate the datum us Show field measu as appropriate, t mark used appro- ft.(m) reap net of ft.(m) astrong ft.(m) astrong ft.	-A30, AR/AH, AR/AO ed. If the datum is different from rements and datum conversion o document the datum conversion.
SECT	ION D - SURVEYOR	R, ENGINEER, OR ARCHITEC	T CERTIFICATIO	DN
This certification is to be signed and set I certify that the information in Sections I understand that any false statement CERTIFIER'S NAME TITLE ADDRESS	s A, B, and C on this	certificate represents my best by fine or imprisonment under 1	efforts to interpre	t the data available.
SIGNATURE		DATE	TELEPHC	DNE
FEMA Form 81-31, January 2003	Se	e reverse side for continuation.		Replaces all previous editions

INFORTANT: In these spaces, o	ony the corresponding information from Costion A	For Insurance Commence Have
BUILDING STREET ADDRESS (Includ	copy the corresponding information from Section A. ding Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO.	For Insurance Company Use: Policy Number
	ang ripu, onit, duite, anaror bidg. No./ OK F.O. NOOTE AND BOA NO.	
CITY	STATE ZIP CODE	Company NAIC Number
	D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CO	,
17	Certificate for (1) community official, (2) insurance agent/company, and (	(3) building owner.
COMMENTS		
		Check here if attachme
SECTION E - BUILDING ELE	VATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO	
For Zone AO and Zone A (without E information for a LOMA or LOMR-F	3FE), complete Items E1. through E5. If the Elevation Certificate is inter , Section C must be completed.	nded for use as supporting
see pages 6 and 7. If no diagra	_(Select the building diagram most similar to the building for which this am accurately represents the building, provide a sketch or photograph.)	
(check one) the highest adjace	luding basement or enclosure) of the building is \  ft. (m) \  in nt grade. (Use natural grade, if available.)	
	openings (see page 7), the next higher floor or elevated floor (elevation bove the highest adjacent grade. Complete Items C3.h and C3.i on fron	
	ninery and/or equipment servicing the building is   _  ft. (m)    ir nt grade. (Use natural grade, if available.)	1. (cm)    above or    below
E5. For Zone AO only: If no flood d	depth number is available, is the top of the bottom floor elevated in acco nce?   Yes   No   Unknown. The local official must certify th	
	IF - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTI	
	horized representative who completes Sections A, B, C (Items C3.h and inity-issued BFE) or Zone AO must sign here. <i>The statements in Sectio</i>	
, ,	AUTHORIZED REPRESENTATIVE'S NAME	
ADDRESS	CITY STATE	ZIP CODE
SIGNATURE	DATE TELEP	HONE
COMMENTS		
COMMENTS		L Check here if attachme
	SECTION G - COMMUNITY INFORMATION (OPTIONAL)	Check here if attachme
The local official who is authorized b Sections A, B, C (or E), and G of thi S1.    The information in Section engineer, or architect who elevation data in the Comn	by law or ordinance to administer the community's floodplain managements is Elevation Certificate. Complete the applicable item(s) and sign below C was taken from other documentation that has been signed and embor is authorized by state or local law to certify elevation information. (Indic	Check here if attachme ent ordinance can complete sed by a licensed surveyor, ate the source and date of the
The local official who is authorized b Sections A, B, C (or E), and G of thi engineer, or architect who elevation data in the Comm Zone AO. 63.    The following information (I	by law or ordinance to administer the community's floodplain management is Elevation Certificate. Complete the applicable item(s) and sign below C was taken from other documentation that has been signed and embor is authorized by state or local law to certify elevation information. (Indic ments area below.) eted Section E for a building located in Zone A (without a FEMA-issued terms G4-G9) is provided for community floodplain management purpos	Check here if attachme ent ordinance can complete sed by a licensed surveyor, ate the source and date of the or community-issued BFE) or es.
<ul> <li>The local official who is authorized b</li> <li>Sections A, B, C (or E), and G of thi</li> <li>Gamma (Gamma)</li> <li>Gamma)</li> <li>G4. PERMIT NUMBER</li> </ul>	by law or ordinance to administer the community's floodplain managements         s Elevation Certificate.       Complete the applicable item(s) and sign below         C was taken from other documentation that has been signed and embories       Section and sign below         C was taken from other documentation that has been signed and embories       Section information.         is authorized by state or local law to certify elevation information.       (Indice nents area below.)         eted Section E for a building located in Zone A (without a FEMA-issued         tems G4-G9) is provided for community floodplain management purpos         G5. DATE PERMIT ISSUED       G6. DATE CERTIFICATE CONSULPD	Check here if attachme ent ordinance can complete , ssed by a licensed surveyor, ate the source and date of the or community-issued BFE) or
<ul> <li>The local official who is authorized b Sections A, B, C (or E), and G of thi 31.    The information in Section engineer, or architect who elevation data in the Comm 32.    A community official comple Zone AO.</li> <li>33.    The following information (I G4. PERMIT NUMBER</li> <li>G7. This permit has been issued for</li> </ul>	by law or ordinance to administer the community's floodplain managements         s Elevation Certificate.       Complete the applicable item(s) and sign below         C was taken from other documentation that has been signed and embories       Sector and sign below         C was taken from other documentation that has been signed and embories       Sector and sign below         C was taken from other documentation that has been signed and embories       Sector and sign below         C was taken from other documentation that has been signed and embories       Indicate and the sector information.         Indicated by state or local law to certify elevation information.       (Indicate and the sector information.         Indicated by state or local law to certify elevation information.       (Indicate and the sector information.         Indicated by state or local law to certify elevation information.       (Indicate and the sector information.         Indicated by state or local law to certify elevation information.       (Indicate and the sector information.         Indicated by state or local law to certify elevation information.       (Indicate and the sector information.         Indicated by state or local law to certify elevation information.       (Indicate and the sector information.         Indicated by state or local law to certify elevation information.       (Indicate and the sector information.         (Indicate and the sector information.       (Indicate and the sector informating)         (G5. DAT	Check here if attachme ent ordinance can complete , ssed by a licensed surveyor, cate the source and date of the or community-issued BFE) or es. DF COMPLIANCE/OCCUPANCY
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#### INSTRUCTIONS FOR COMPLETING THE ELEVATION CERTIFICATE

The Elevation Certificate is to be completed by a land surveyor, engineer, or architect who is authorized by law to certify elevation information when elevation information is required for Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, or AR/AO. Community officials who are authorized by law or ordinance to provide floodplain management information may also complete this form. For Zones AO and A (without BFE), a community official, a property owner, or an owner's representative may provide information on this certificate, unless the elevations are intended for use in supporting a LOMA or LOMR-F. Certified elevations must be included if the purpose of completing the Elevation Certificate is to obtain a LOMA or LOMR-F.

In Puerto Rico only, elevations for building information and flood hazard information may be entered in meters.

#### SECTION A - PROPERTY OWNER INFORMATION

This section identifies the building, its location, and its owner. Enter the name(s) of the building owner(s), the building's complete street address, and the lot and block number. If the building's address is different from the owner's address, enter the address of the building being certified. If the address is a rural route or a Post Office box number, enter the lot and block numbers, the tax parcel number, the legal description, or an abbreviated location description based on distance and direction from a fixed point of reference. For the purposes of this certificate, "building" means both a building and a manufactured (mobile) home.

A map may be attached to this certificate to show the location of the building on the property. A tax map, FIRM, or detailed community map is appropriate. If no map is available, provide a sketch of the property location, and the location of the building on the property. Include appropriate landmarks such as nearby roads, intersections, and bodies of water. For building use, indicate whether the building is residential, non-residential, an addition to an existing residential or non-residential building, an accessory building (e.g., garage), or other type of structure. Use the Comments area of Section F if needed.

If latitude and longitude data are available, enter them in degrees, minutes, and seconds, or in decimal degrees, taken at the center of the front of the building. Enter arc seconds to two decimal places. Indicate the horizontal datum and the source of the measurement data (for example, taken with GPS, scaled from a USGS Quad Map, etc.).

#### SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Complete the Elevation Certificate on the basis of the FIRM in effect at the time of the certification.

The information for Section B is obtained by reviewing the FIRM panel that includes the building's location. Information about the current FIRM and a pamphlet titled "Guide to Flood Maps" are available from the Federal Emergency Management Agency (FEMA) website at http://www.fema.gov or by calling 1-800-427-4661. If a Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR-F) has been issued by FEMA, please provide the letter date and case number in the Comments area of Section D or Section G, as appropriate.

**Item B1.** NFIP Community Name & Community Number. Enter the complete name of the community in which the building is located and the associated 6-digit community number. For a building that is in an area that has been annexed by one community but is shown on another community's FIRM, enter the community name and 6-digit number of the annexing community. For a newly incorporated community, use the name and 6-digit number of the new community. Under the NFIP, a "community" is any State or area or political subdivision thereof, or any Indian tribe or authorized native organization, that has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction. To determine the current community number, see the NFIP *Community Status Book*, available on FEMA's website at http://www.fema.gov or by calling 1-800-427-4661.

**Item B2.** County Name. Enter the name of the county or counties in which the community is located. For an unincorporated area of a county, enter "unincorporated area." For an independent city, enter "independent city."

Item B3. State. Enter the 2-letter state abbreviation (for example, VA, TX, CA).

**Item B4.** Map and Panel Number. Enter the 10-digit number shown on the FIRM panel where the building or manufactured (mobile) home is located. The first six digits will not match the NFIP community number: 1) when the sixth digit is a "C," in which case the FIRM panel is in a countywide format; or 2) when one community has annexed land from another community but the FIRM panel has not been updated to reflect this annexation. If the sixth digit is a "C," it is followed by a four-digit map number. For maps not in countywide format, enter the "community panel number" shown on the FIRM.

Item B5. Suffix. Enter the suffix letter shown on the FIRM panel that includes the building's location.

Item B6. FIRM Index Date. Enter the effective date or map revised date shown on the FIRM Index.

**Item B7.** FIRM Panel Effective/Revised Date. Enter the map effective date or the map revised date shown on the FIRM panel. This will be the latest of all dates shown on the map. The current FIRM panel effective date can be determined by calling 1-800-427-4661.

**Item B8.** Flood Zone(s). Enter the flood zone, or flood zones, in which the building is located. All flood zones containing the letter "A" or "V" are considered Special Flood Hazard Areas. The flood zones are A, AE, A1-A30, V, VE, V1-V30, AH, AO, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO. Each flood zone is defined in the legend of the FIRM panel on which it appears.

**Item B9.** Base Flood Elevation(s). Using the appropriate Flood Insurance Study (FIS) Profile, Flood Elevation Table, or FIRM panel, locate the property and enter the BFE (or base flood depth) of the building site. If the building is located in more than one flood zone in Item B8., list all appropriate BFEs in Item B9. BFEs are shown on a FIRM or FIS Profile for Zones A1-A30, AE, AH, V1-V30, VE, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO; flood depth numbers are shown for Zone AO. Use the AR BFE if the building is located in any of Zones AR/A, AR/AE, AR/A1-A30, AR/AH, or AR/AO. In A or V zones where BFEs are not provided on the FIRM, the community may have established BFEs or obtained BFE data from other sources. For subdivisions and other developments of more than 50 lots or 5 acres, establishment of BFEs is required by the community's floodplain management ordinance. If the BFE is obtained from another source, enter the BFE in Item B9.

Item B10. Indicate the source of the BFE that you entered in Item B9.

Item B11. Indicate the elevation datum to which the elevations on the applicable FIRM are referenced.

**Item B12**. Indicate whether the building is located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA). Federal flood insurance is prohibited in designated CBRS areas for buildings or manufactured (mobile) homes built or substantially improved after the date of the CBRS designation. An information sheet explaining CBRS areas may be obtained on FEMA's website at http://www.fema.gov or by calling 1-800-427-4661.

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

Complete Section C if the building is located in any of Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, or AR/AO, or if this certificate is being used to support a LOMA or LOMR-F. If the building is located in Zone AO or Zone A (without BFE), complete Section E instead. To ensure that all required elevations are obtained, it may be necessary to enter the building (for instance, if the building has a basement or sunken living room, split-level construction, or machinery and equipment).

Surveyors may not be able to gain access to some crawl spaces to shoot the elevation of the crawl space floor. If access to the crawl space cannot be gained, use the following guidance:

- Use a yardstick or tape measure to measure the floor height to the "next higher floor," and then subtract the crawl space height from the elevation of the "next higher floor."
- Contact the local floodplain administrator of the community that the building is located in. The community may have documentation of the elevation of the crawl space floor as part of the permit issued for the building.
- If the property owner has documentation or knows the height of the crawl space floor to the next higher floor, try to verify this by looking inside the crawl space through any openings or vents.

In all three cases, provide the elevation in the Comments area and a brief description of how the elevation was obtained.

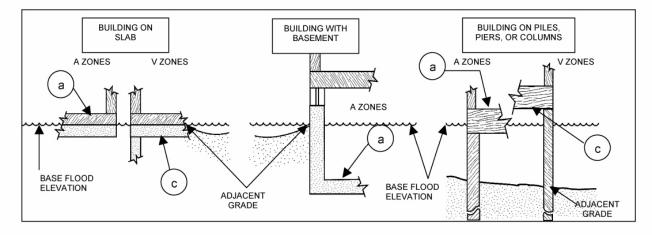
Item C1. Indicate whether the elevations to be entered in this section are based on construction drawings, a building under construction, or finished construction. For either of the first two choices, a post-construction Elevation Certificate will be

required when construction is complete. If the building is under construction, include only those elevations that can be surveyed in Items C3.a-g. Use the Comments area to provide elevations obtained from the construction plans or drawings. Select "finished construction" only when all machinery and/or equipment—furnaces, hot water heaters, heat pumps, air conditioners, and elevators and their associated equipment—have been installed and the grading around the building is completed.

**Item C2.** Select the diagram on pages 6 and 7 that best represents the building. Then enter the diagram number and use the diagram to identify and determine the appropriate elevations requested in Items C3.a-g. If you are unsure of the correct diagram, select the diagram that most closely resembles the building being certified, or provide a sketch or photograph of the building and enter all elevations in Items C3.a-g.

**Item C3.** Indicate whether the elevation reference mark (benchmark) used during the field survey is an elevation mark on the FIRM. If it is not, indicate the source and datum for the elevation. Vertical control benchmarks other than those shown on the FIRM are acceptable for elevation determinations. Show the conversion from the field survey datum used to the datum used for the BFE(s) entered in Item B9. All elevations for the certificate must be referenced to the datum on which the BFE is based. Show the datum conversion, if applicable, in this section or in the Comments area of Section D. For property experiencing ground subsidence, the most recently adjusted reference mark elevations must be used for determining building elevations. However, when subsidence is involved, the BFE should not be adjusted. Enter elevations in Items C3.a-g to the nearest tenth of a foot (nearest tenth of a meter, in Puerto Rico).

**Items C3.a-d.** Enter the building elevations (excluding the attached garage) indicated by the selected building diagram (Item C2.) in Items C3.a-c. If there is an attached garage, enter the elevation for top of attached garage slab in Item C3.d. (Because elevation for top of attached garage slab is self-explanatory, attached garages are not illustrated in the diagrams.) If the building is located in a V zone on the FIRM, complete Item C3.c. If the flood zone cannot be determined, enter elevations for all of Items C3.a-g. For buildings in A zones, elevations a, b, d, and e should be measured at the top of the floor. For buildings in V zones, elevation c must be measured at the bottom of the lowest horizontal structural member of the floor (see drawing below). For buildings elevated on a crawl space, Diagram 8, enter the elevation of the top of the crawl space floor in Item C3.a, whether or not the crawl space has openings (flood vents). *If any item does not apply to the building, enter "N/A" for not applicable.* 



**Item C3.e.** Enter the lowest elevation of machinery and/or equipment—furnaces, hot water heaters, heat pumps, air conditioners, and elevators and their associated equipment—in an attached garage or enclosure or on an open utility platform that provides utility services for the building. If the machinery and/or equipment is mounted to a wall, pile, etc., enter the platform elevation of the machinery and/or equipment. Indicate machinery/equipment type in the Comments area of Section D or Section G, as appropriate. *If this item does not apply to the building, enter "N/A" for not applicable.* 

**Items C3.f-g.** Adjacent grade is defined as the elevation of the ground, sidewalk, patio slab, or deck support immediately next to the building. If the certificate is to be used for a LOMA or LOMR-F, provide in the Comments area the lowest adjacent grade elevation measured at the deck support or stairs if that elevation is lower than the building's lowest adjacent grade. For

Zone AO, use the natural grade elevation, if available. This measurement must be to the nearest tenth of a foot (nearest tenth of a meter, in Puerto Rico) if this certificate is being used to support a request for a LOMA or LOMR-F.

**Items C3.h-i.** Enter the number of permanent openings (flood vents) in the walls supporting the building, including the attached garage, that are no higher than 1.0 foot above the adjacent grade. Determine the total area of all such openings in square inches (square cm, in Puerto Rico), and enter the total in Item C3.i. If the building has no permanent openings (flood vents) within 1.0 foot above adjacent grade, enter "0" (zero) for each of Items C3.h and C3.i. Enter in the Comments area whether the openings are on the foundation walls of the building and/or on the walls of the garage.

#### SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

Complete as indicated. This section of the Elevation Certificate may be signed by only a land surveyor, engineer, or architect who is authorized by law to certify elevation information. Place embossed seal and signature in the box next to elevations in Section C. A flat stamp is acceptable only in states that do not authorize use of an embossed seal over the signature of a professional. You are certifying that the information in Sections A, B, and C on this certificate represents your best efforts to interpret the data available and that you understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001. Use the Comments area of Section D, on the back of the certificate, to provide datum, elevation, or other relevant information not specified on the front.

#### SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO & ZONE A (WITHOUT BFE)

Complete Section E if the building is located in Zone AO or Zone A (without BFE). Otherwise, complete Section C instead.

**Item E1.** Select the diagram on pages 6 and 7 that best represents the building; then enter the diagram number. If you are unsure of the correct diagram, select the diagram that most closely resembles the building, or provide a sketch or photograph. Explain in the Comments area if the measurement provided under Item E.2, E.3, or E.4 is based on the "natural grade."

**Item E2.** Enter the height in feet and inches (meters and centimeters, in Puerto Rico) of the top of the bottom floor (as indicated in the applicable diagram) above or below the highest adjacent grade (HAG). For post-FIRM buildings in Zone AO, the community's floodplain management ordinance requires that this value equal or exceed the base flood depth on the FIRM. Buildings in Zone A (without BFE) may qualify for a lower insurance rate if an engineered BFE is developed at the site.

**Item E3.** For Building Diagrams 6-8 with proper openings (see page 7), enter the height in feet and inches (meters and centimeters, in Puerto Rico) of the next higher floor or elevated floor (as indicated in the applicable diagram) above the highest adjacent grade (HAG). Be sure that you have completed Items C3.h and C3.i on the front of the form to show the number of permanent openings (flood vents) within 1 foot above adjacent grade and the total area of the openings.

**Item E4**. Enter the height in feet and inches, in relation to the highest adjacent grade next to the building, of the platform that supports the machinery and/or equipment servicing the building. Indicate machinery/equipment type in the Comments area of Section E. *If this item does not apply to the building, enter "N/A" for not applicable.* 

**Item E5.** For those communities where this base flood depth is not available, the community will need to determine whether the top of the bottom floor is elevated in accordance with the community's floodplain management ordinance.

#### SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

Complete as indicated. This section is provided for certification of measurements taken by a property owner or property owner's representative when responding to Sections A, B, C (Items C3.h and C3.i only), and E. The address entered in this section must be the actual mailing address of the property owner or property owner's representative who provided the information on the certificate.

#### **SECTION G - COMMUNITY INFORMATION (OPTIONAL)**

Complete as indicated. The community 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. If the authorized community official completes Sections C, E, or G, complete the appropriate item(s) and sign this section.

Check **Item G1.** if Section C is completed with elevation data from other documentation, including elevations obtained from the Community Rating System Elevation Software, that has been signed and embossed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. Indicate the source of the elevation data and the date obtained in the Comments area of Section G. If you are both a community official and a licensed land surveyor, engineer, or architect authorized by law to certify elevation information, and you performed the actual survey for a building in Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/A1-A30, AR/AE, AR/AH, or AR/AO, you must also complete Section D.

Check Item G2. if information is entered in Section E by the community for a building in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

Check **Item G3.** if the information in Items G4-G9 has been completed for community floodplain management purposes to document the as-built lowest floor elevation of the building. Section C of the Elevation Certificate records the elevation of various building components but does not determine the lowest floor of the building or whether the building, as constructed, complies with the community's floodplain management ordinance. This must be done by the community. Items G4-G9 provide a way to document these determinations.

Item G4. Permit Number. Enter the permit number or other identifier to key the Elevation Certificate to the permit issued for the building.

Item G5. Date Permit Issued. Enter the date the permit was issued for the building.

Item G6. Date Certificate of Compliance Issued. Enter the date that the Certificate of Compliance or Occupancy or similar written official documentation of as-built lowest floor elevation was issued by the community as evidence that all work authorized by the floodplain development permit has been completed in accordance with the community's floodplain management laws or ordinances.

**Item G7.** New Construction or Substantial Improvement. Check the applicable box. "Substantial Improvement" means any reconstruction, rehabilitation, addition, or other improvement of a building, the cost of which equals or exceeds 50 percent of the market value of the building before the start of construction of the improvement. The term includes buildings that have incurred substantial damage, regardless of the actual repair work performed.

Item G8. As-built lowest floor elevation. Enter the elevation of the lowest floor (including basement) when the construction of the building is completed and a final inspection has been made to confirm that the building is built in accordance with the permit, the approved plans, and the community's floodplain management laws or ordinances. Indicate the elevation datum used.

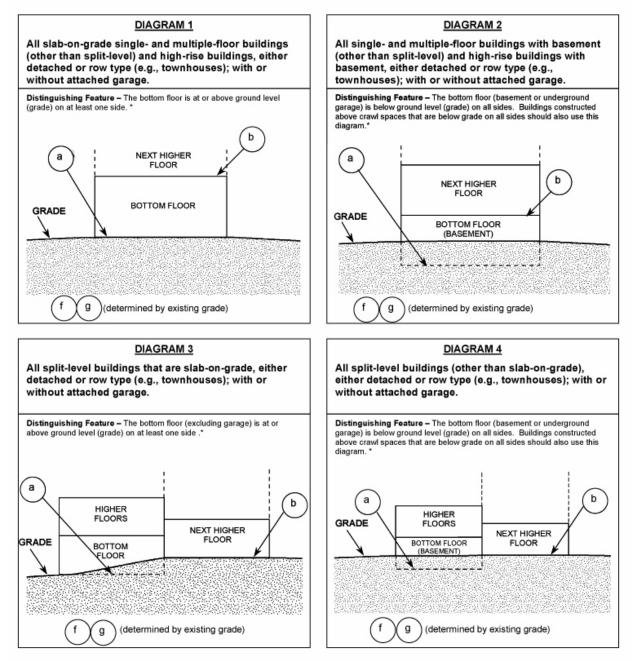
Item G9. BFE. Using the appropriate FIRM panel, FIS, or other data source, locate the property and enter the BFE (or base flood depth) of the building site. Indicate the elevation datum used.

Enter your name, title, and telephone number, and the name of the community. Sign and enter the date in the appropriate blanks.

#### BUILDING DIAGRAMS

The following eight 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 C2. and the elevations in Items C3.a-C3.g.

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).



\* 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. Instructions - Page 6



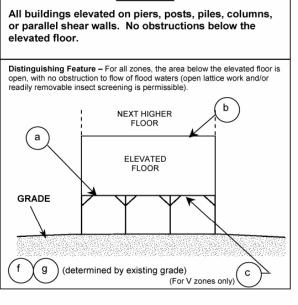


DIAGRAM 7 All buildings elevated on full-story foundation walls with a partially or fully enclosed area below the elevated floor. This includes walkout levels, where at least one side is at or above grade. The principal use of this building is located in the elevated floors of the building. Distinguishing Feature - For all zones, the area below the elevated floor is enclosed, either partially or fully. In A Zones, the partially or fully enclosed area below the elevated floor is with or without openings\*\* present in the walls of the enclosure. Indicate information about openings in Section C Building Elevation Information (Survey Required). b NEXT HIGHER а а FLOOR GRADE GRADE g f WALKOUT LEVEL f OPENINGS\*\* OPENINGS\* h h i

or parallel shear walls with full or partial enclosure below the elevated floor. Distinguishing Feature - For all zones, the area below the elevated floor is enclosed, either partially or fully. In A Zones, the partially or fully enclosed area below the elevated floor is with or without openings\*\* present in the walls of the enclosure. Indicate information about openings in Section C, Building Elevation Information (Survey Required). NEXT HIGHER FLOOR а b ELEVATED FLOOR GRADE ENCLOSURE f (determined by g с existing grade) (For V zones only)

DIAGRAM 6

All buildings elevated on piers, posts, piles, columns,

# Is All buildings elevated on a crawl space with the floor of the crawl space at or above grade on at least one side, with or without an attached garage. floor is osed the crawl space by solid or partial perimeter walls. In all A zones, the crawl space is with or without openings\*\* present in the walls of the crawl space. Indicate information about the openings in Section C, Building Elevation Information (Survey Required). Image: the crawle comparison of the crawle comparison o

\*\* An "opening" (flood vent) is defined as a permanent opening in a wall that allows for the free passage of water automatically in both directions without human intervention. Under the NFIP, a minimum of two openings is required for enclosures or crawl spaces with a total net area of not less than one square inch for every square foot of area enclosed. Each opening must be on different sides of the enclosed area. If a building has more than one enclosed area, each area must have openings on exterior walls to allow floodwater to directly enter. The bottom of the openings must be no higher than one foot above the grade underneath the flood vents. Alternatively, you may submit a certification by a registered professional engineer or architect that the design will allow for the automatic equalization of hydrostatic flood forces on exterior walls. A window, a door, or a garage door is not considered an opening.