

### City of Marion Planning & Development Services 194 N. Main Street Marion, NC 28752

Dear Applicant:

The City of Marion is an active participant in the National Flood Insurance Program (NFIP), which was established by the U.S. Congress under the National Flood Insurance Act of 1968. The NFIP is a Federal program that enables property owners to purchase insurance as a protection against flood losses. In exchange State and local communities are required to establish floodplain management regulations to help reduce future flood damages.

Under NFIP regulations, participating communities are required to regulate all development within a Special Flood Hazard Area (SFHA). The term "Development" is defined as:

"any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials."

Before a property owner can undertake any development activity within a SFHA, a development permit must be obtained from the local floodplain administrator. The local floodplain administrator is responsible for reviewing the proposed development to ensure that it complies with the floodplain management ordinance.

The following information is a collection of materials published by the Federal Emergency Management Agency (FEMA) and the City of Marion to help familiarize the applicant with the application and review process. The enclosed information is only a summary of available NFIP information. Additional information may be obtained by download from FEMA's NFIP website or from the local floodplain administrator. Please note that the City of Marion makes every effort to provide the most accurate information to the public, however the enclosed materials are subject to periodic amendment and update. Therefore, it is the Applicant's responsibility to verify that the enclosed information is the most current and accurate information available.

If you have any questions or need additional information please contact the Planning & Development Services Department at (828) 652-3551. Thank you for your cooperation in building a community that is a safe place to live, work and play.

Sincerely and respectfully,

Heather A. Cotton, AICP Floodplain Administrator Planning & Development Services Director

## OVERVIEW OF THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP).

The National Flood Insurance Program (NFIP) is administered by the Federal Emergency Management Agency (FEMA) and has three main elements:

- 1. *Hazard identification and mapping*, under which engineering studies are conducted and flood maps are prepared to delineate areas that are predicted to be subject to flooding under certain conditions;
- 2. *Floodplain management criteria for development*, which establish the minimum requirements for communities to apply to development within mapped flood hazard areas with the intent of recognizing hazards in the entire land development process; and
- 3. *Flood insurance*, which provides financial protection for property owners to cover flood-related damage to buildings and contents.

## FLOODPLAIN DEVELOPMENT APPLICATION

Prior to any and all development activity within a designated Special Flood Hazard Area (SFHA) the property owner is required to submit a floodplain development permit application in addition to all other applicable development applications including but not limited to a building permit application and zoning application. A copy of the floodplain application is located in appendices of this packet.

## **Elevation Certificates**

Certain ground and building elevations are to be surveyed and certified so that building officials can determine the elevation of the lowest floor. The lowest floor elevation is the most significant element in determining that floodplain construction is compliant. The same elevation certification is used by insurance agents to determine appropriate insurance ratings. Ideally, the elevations are checked when the lowest floor level is set and before further vertical construction takes place. That way, errors in the elevation can be corrected with minimal cost and delay. Because the building official's determination of the "lowest floor" is, in part, dependent on the location of utilities and the final site grading, a final Elevation Certificate shall be completed and sealed when that work is finished.

The Elevation Certificate (FEMA Form 81-31) is located in appendices of this packet or can be ordered from FEMA. It is also available online in the library section of FEMA's Web site, <u>www.fema.gov/library/elvcert.pdf.</u> The form includes several pages of instructions and illustrations.

A North Carolina registered surveyor or engineer who is licensed to perform elevation surveys is required to complete, sign, and affix a professional seal to the Elevation Certificate. The certificate must be dated to document when the elevations were surveyed because continuing construction or future modifications could alter and/or outdate the information shown. The registered professional is responsible for obtaining and certifying accurate elevations of key ground and building elevations. Using the diagrams provided by FEMA, the registered professional determines which building elevations to survey by selecting the building diagram that most closely represents the actual building. If the diagrams do not match the configuration of the building, the registered professional may need to note in the comment section to clarify the diagram selected. The Elevation Certificate and building diagrams specify the various elevations that are to be surveyed, including:

- The bottom floor and the next higher floor;
- The floor of enclosures, attached garages, below-grade areas, and the interior grade of crawl spaces;
- For all buildings, the highest and lowest adjacent grades; and
- For buildings with enclosures with flood vents, the number and total area of vents that are within 12 inches of the adjacent grade are to be noted on the certificate.

## INSPECTIONS

The Floodplain Administrator and Building Inspector will conduct inspections throughout the development process. The following is a brief description of inspections that will be performed to facilitate compliance with flood management provisions:

- 1. Stake Out or Site Inspection. Checking that the lowest floor is properly elevated is easiest if there is a nearby elevation benchmark or reference mark. If one of the reference marks shown on the flood hazard map is not close to the site, placement of a temporary reference mark on-site can make it easier to check the elevation when the floor level is set, and to certify the elevation when the "as-built" Elevation Certificate is completed. The best time to make sure a building will be located correctly is during the site inspection when setbacks and distances from the watercourse or floodway can be checked.
- 2. *Fill Inspection*. Fill that is placed to structurally support a building should be inspected to check compaction. It is also important to check that the final elevation of the fill is as high as required by the permit because this may affect the final elevation of the lowest floor.
- 3. Footing or Foundation Inspection. For foundations that will create enclosures below otherwise elevated buildings, inspectors will check for the specified number, size, and location of flood openings. Flood openings are to be close to the ground and should not be confused with under-floor air ventilation openings, which are located just under the floor level. For

slab-on-grade buildings, the lowest floor inspection is conducted at this time.

- 4. Lowest Floor Inspection. Under IBC. Section 109.3 Inspections, and IRC<sup>™</sup> R109.1.3 Floodplain Inspections, the certification of the lowest floor elevation is to be submitted. An important part of administering provisions for flood resistant construction is making sure that buildings are elevated properly. The best time to verify compliance is when the lowest floor elevation is set and before further vertical construction takes place. An error of a foot or two in elevation may seem minor, but correction can be expensive and complicated if that error is discovered once the walls and roof are in place.
- 5. *Final Inspection*. A final inspection to document compliance with the floodplain management requirements can be done at the same time as the final inspection to issue the final Certificate of Occupancy. During the final inspection, some of the important things that the Inspector will check include:
  - a. Utilities and other building elements are located properly, usually above the BFE. Frequently overlooked items include electrical outlets, plumbing fixtures, and ductwork that are installed under the floor, usually in a crawl space.
  - b. In flood hazard areas not subject to high velocity wave action (A Zones), an inspection of enclosures below elevated buildings will be conducted to ensure the flood openings are correct in number, size, and placement. If standard air ventilation units are used as flood vents, the louvers should be permanently disabled so that floodwater can automatically enter and exit freely, without any human intervention.
  - c. For enclosed areas below the BFE, the Inspector will check that the approved use (parking, storage, and building access) appears to be consistent with what has been built.
  - d. Check that exterior fill is placed according to the approved plans and specifications, and that next to all sides of the foundation it is not higher than the interior slab or grade of crawl spaces.
  - e. Verify that flood damage resistant materials are used below the BFE. Refer to FEMA Technical Bulletin *Flood-Resistant Material Requirements for Buildings Located in Special Flood Hazard Areas* (FEMA FIA-TB #2).
  - f. Examine building support utilities to determine if they have been elevated or otherwise installed according to plans to resist flood damage.
  - g. Collect the "as-built" Elevation Certificate prior to the final sign-off.
  - h. Complete and sign the plan review and inspection checklist and place all inspection reports in the permit file.

## **Development in Floodway & Non-Encroachment Areas**

Development within a designated floodway and/or non-encroachment area is prohibited, including fills, new construction, and substantial improvements, if they cause flood levels to increase more than a designated height. The designated height limit on the allowable increase is found in the floodway table of the effective Flood Insurance Study.

Prior to local approval of any proposed development within a floodway or nonencroachment area that could cause an increase in the Base Flood Elevation, a Conditional Letter of Map Amendment (CLOMR) and floodway revision must be reviewed and issued by FEMA. Preliminary permit approvals will be conditioned on the applicant obtaining the CLOMR.

*Engineering analyses.* Applications for permits for certain proposed activities, such as flood control structures, waterway alterations, or fill for multiple lots, are to be supported with documented analyses. FEMA reviews the analyses to determine whether the proposals meet the criteria for a map revision. FEMA's initial comments are known as "conditional determinations" that are issued as "Conditional Letters of Map Revision" (CLOMR) and "Conditional Letters of Map Revision Based on Fill" (CLOMR-F). When a project is completed, "as-builts" are submitted to support FEMA's issuance of a final Letter of Map Amendment (LOMA) or a map revision.

Flood fringe fills (individual lots). If individual lots are filled so that the buildable surface is at or above the BFE or DFE, owners may submit documentation and request that FEMA remove the flood hazard area designation. If the fill meets certain criteria, FEMA will issue a "Letter of Map Revision based on Fill" (LOMR-F). Without the LOMR-F, lenders will require that flood insurance be purchased on buildings that, based on the FIRM, appear to be within the mapped flood hazard area.

Naturally high ground (individual lots). Because of the scale of the original topography and the approximate nature of flood hazard mapping techniques, some land areas may have been inadvertently included in the mapped flood hazard area. Land owners may submit documentation to show that an individual structure and/or a legally described parcel of land is above the BFE. FEMA will issue a "Letter of Map Amendment" (LOMA) if it is determined that the parcel of land is actually above the BFE. The LOMA applies to only the described structure or parcel, and officially amends the effective map.

## AMENDMENTS AND REVISIONS TO NFIP

FEMA has established procedures for changing or correcting a Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) reports based on new or revised scientific or technical data. The following provides a brief description of applications to amendments and revisions to the NFIP.

## MT-1 SUBMITTALS

MT-1 application forms are required for the following map amendment requests:

- LOMA Letters of Map Amendment (LOMAs) is an official revision by letter to an effective NFIP map stating that an **existing** structure or parcel of land that has not been elevated by fill has been incorrectly included in a designated flood hazard area.
- CLOMA Conditional Letters of Map Amendment (CLOMAs) is a document issued by FEMA and the NCFMP pertaining to a proposed structure that will not be elevated by the placement of fill (therefore, it is located on natural grade). The document states whether the proposed structure would be inundated by a flood event that has a 1-percentannual-chance of being equaled or exceeded in any given year (base flood).
- eLOMA- Electronic Letters of Map Amendment (eLOMAs) is an online determination tool for MT-1 requests that are processed via the MIP. The tool will create a determination for the subject property using information supplied by a licensed professional (engineer or surveyor). This process is limited to existing single residential structures or properties that have not been elevated by the placement of fill. The eLOMA tool is an alternative to the traditional LOMA request process mentioned above.
- **LOMR-F** Letters of Map Revision-Based on Fill (LOMR-F), is a letter from FEMA stating that an existing structure or parcel of land that has been elevated by fill would not be inundated by the base flood.
- **CLOMR-F** Conditional Letters of Map Revision-Based on Fill (CLOMR-F) is a letter from FEMA stating that a parcel of land or proposed structure that is to by elevated by fill would not be inundated by the base flood if fill is placed on the parcel as proposed or the structure is built as proposed.

## MT-2 SUBMITTALS

MT-2 applications are required for the following map revisions:

 LOMR - Letters of Map Revision (LOMRs), is an official revision to the FIRM and/or FBFM, and sometimes the FIS report, and when appropriate, includes a description of the modifications, which are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the SFHA.. The LOMR is generally accompanied by an annotated copy of the affected portions of the FIRM, FBFM, or FIS report.

- **CLOMR** Conditional Letters of Map Revision (CLOMRs), is a letter providing comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the SFHA. A CLOMR does not revise the effective FIS, FIRM, or FBFM; however, the CLOMR does describe changes to the effective FIS, FIRM, or FBFM, or FBFM that will result from the project, if built as proposed. The CLOMR also describes any additional information (e.g., as-built plans, modeling) required to process the final determination as a PMR or LOMR.
- Informational letters (deferral letters and Best Available Data Letters [BADLs]). An informational letter does not officially revise an NFIP map or comment on a proposed project. The three types of informational letters (deferral letters, best available data letters, and informational letters) are considered letter actions and the processing of these actions should be consistent with that of CLOMRs and LOMRs up to the point of preparation of determination letters.

For any MT-2 revision request involving an area of the FIRM containing the SFHA that is not Zone A, the requestor must furnish a written request to the NCFMP for the effective model from the NCFMP.

MT-1 and MT-2 Forms and information regarding all submittal requirements can be found in the appendices of this package or online at http://www.ncfloodmaps.com. Please note that FEMA is responsible for the review of all MT-1 applications, whereas NCFMP has been authorized by FEMA to review all MT-2 applications. However, NCFMP will facilitate and coordinate issues with FEMA and the NSP for all MT-1 and MT-2 case-related issues.

## CITY OF MARION FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

Floodplain Administrator to Complete:			Date:	
Rece	eived by:			Permit Number:
Loca	ation of Property:		Property P.	I.N.:
Тур	e of Development: Excavation: Fi Road Construction: Re Addition: Re	II: Grading: esidential Construction: enovation:	Other (specify): _	Utility Construction: Nonresidential Construction:
Size	e of Development:			
FIR	M Data: Map Panel No.:	Suffix	Map	Panel Date:
	Flood Zone:		Map	Index Date:
Reg	ulatory Floodway/Non-Encroachment Area	Info: (Check correct option below	ow)	
	Inside Regulatory Floodway/Non-e	encroachment area	No Regulatory Fl	oodway/Non-encroachment area provided
Dev	velopment Standards Data:			
1.	If located within a Regulatory Floodway of <i>may wish to site this section of your local</i>	r Non-encroachment area as noted abo Lordinance regarding no-rise certific	ve, attach engineer cation within floo	ring certification and supporting data as required. ( <i>you dways or non-encroachment areas</i> )
2.	Base flood elevation (BFE) per FIRM at d	levelopment site (NG	VD 1929 or NAV	D 1988). Circle correct datum.
3.	Regulatory flood elevation at developmen <i>datum</i> .	t site (BFE + locally adopted freeboa	rd):	(NGVD 1929 or NAVD 1988). <i>Circle correct</i>
4.	Elevation in relation to mean sea level (M (NGVD 1929 or NAVD 1988). <i>Circle co</i>	SL) at or above which the lowest floo <i>rrect datum</i> .	or (including base	ment) must be constructed
5.	Elevation in relation to mean sea level (M electrical equipment must be installed	SL) at or above which all attendant u (NGVD 192	tilities to include, 9 or NAVD 1988)	but not limited to, all heating, air conditioning and ). <i>Circle correct datum.</i>
6.	Will garage (if applicable) be used for any garage must be used in determining the lo	v purpose other than parking vehicles, west floor elevation.	, building access,	or storage? If yes, then the
7.	Proposed method of elevating the structur (a) If foundation wall is used - provide mi (b) Total area of openings required:	e:	. inch per sq. foot	of enclosed footprint area below BFE)
7.	Will any watercourse be altered or relocat If yes, attach a description of the extent of	ted as a result of the proposed develop f the alteration or relocation.	pment?	
8.	Floodproofing information (if applicable) Elevation in relation to mean sea level (M <i>Circle correct datum</i> .	: (SL) to which structure shall be flood	proofed	(NGVD 1929 or NAVD 1988).
<u>App</u> bein bein of M	blicant acknowledgment: I the undersigned undersigned undersigned and correct and that the plans and supporting of germitted, an elevation and/or floodproofination Planning & Development Services Determined and the planning of the planet services Determined and the planet services and t	Inderstand that the issuance of a flood lata have been or shall be provided as ng certificate signed by a professiona partment indicating the "as built" ele	Iplain developmer required. I also u l engineer or regis vations in relation	nt permit is contingent upon the above information understand that prior to occupancy of the structure stered land surveyor must be on file with the City in to mean sea level (MSL).
	Print or Type Name of Applicant		Print or Type Nar	ne of Agent
	Signature of Agent & Date		Signature of Appl	licant & Date
	Address & Telephone Number		Address & Teleph	none Number
Fou	ndation Inspection Date:		Inspector	





## **ELEVATION CERTIFICATE**

AND

**INSTRUCTIONS** 

## 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."

## **ELEVATION CERTIFICATE**

OMB No. 1660-0008 Expires February 28, 2009

National Flood Insurance Program	importa	nt: Read the instructions	on pages 1-8.	
	SE	CTION A - PROPERTY INF	ORMATION	For Insurance Company Use:
A1. Building Owner's Name				Policy Number
A2. Building Street Address (inc	luding Apt., Unit, Suite, and/	or Bldg. No.) or P.O. Route and	Box No.	Company NAIC Number
City		State		ZIP Code
A3. Property Description (Lot ar	nd Block Numbers, Tax Parce	el Number, Legal Description, etc	2.)	
A4. Building Use (e.g., Residen	tial, Non-Residential, Addition	n, Accessory, etc.)	Horizontal	
A6. Attach at least 2 photograph	ns of the building if the Certifi	cate is being used to obtain floor	d insurance.	
A7. Building Diagram Number		Ŭ		
A8. For a building with a crawl s	pace or enclosure(s), provide	e: A9. F	For a building with an at	tached garage, provide:
<ul> <li>a) Square footage of crawl</li> <li>b) No of permanent flood</li> </ul>	space of enclosure(s)	or sq 11 a	<ul> <li>Square rootage of an No of permanent floot</li> </ul>	tached garagesq π
enclosure(s) walls within	1.0 foot above adjacent gra	de	walls within 1.0 foot	above adjacent grade
c) Total net area of flood o	penings in A8.b	sq in	c) Total net area of floo	od openings in A9.b sq in
	SECTION B - FLOO	D INSURANCE RATE MAP	(FIRM) INFORMATI	ON
B1. NFIP Community Name & C	ommunity Number	B2. County Name		B3. State
B4, Map/Panel Number B	5. Suffix B6. FIRM Ind	ex B7, FIRM Panel	B8, Flood	B9. Base Flood Flevation(s) (Zone
	Date	Effective/Revised Da	te Zone(s)	AO, use base flood depth)
310 Indicate the source of the B	ase Flood Elevation (BEE) da	ata or base flood depth entered i	n Item B9	
FIS Profile	M Community Dete	rmined Other (Descri	be)	
311. Indicate elevation datum us	ed for BFE in Item B9: N	GVD 1929 NAVD 1988	Other (Describe)	
312. Is the building located in a C Designation Date	Coastal Barrier Resources Sy	vstem (CBRS) area or Otherwise	Protected Area (OPA)	? Yes No
	SECTION C - BUILDIN	G ELEVATION INFORMATI	ON (SURVEY REQU	IIRED)
C1. Building elevations are based *A new Elevation Certificate	d on: Construction Dra vill be required when constru	wings* Building Und ction of the building is complete.	der Construction*	Finished Construction
<ol> <li>Elevations – Zones A1-A30, below according to the building</li> </ol>	AE, AH, A (with BFE), VE, V <sup>,</sup> ng diagram specified in Item	1-V30, V (with BFE), AR, AR/A, / A7.	\R/AE, AR/A1-A30, AR	/AH, AR/AO. Complete Items C2.a-g
Benchmark Utilized		Vertical	Datum	
Conversion/Comments				
			Check the measu	rement used.
a) Top of bottom floor (incl	uding basement, crawl space	e, or enclosure floor)	<u>.                                    </u>	neters (Puerto Rico only)
b) Top of the next higher fl	or		<u>.                                    </u>	neters (Puerto Rico only)
c) Bottom of the lowest ho	izontal structural member (V	Zones only)	feetn	neters (Puerto Rico only)
d) Attached garage (top of	SIAD)	a the building		neters (Puerto Rico only)
(Describe type of equipr	nent in Comments)			leters (Fuerto Rico only)
f) Lowest adjacent (finishe	d) grade (LAG)		feet n	neters (Puerto Rico only)
g) Highest adjacent (finishe	ed) grade (HAG)		feet n	neters (Puerto Rico only)
	SECTION D - SURVE	YOR, ENGINEER, OR ARCH	IITECT CERTIFICAT	TION
This certification is to be signed a information. <i>I certify that the info I understand that any false state</i>	and sealed by a land surveyo ormation on this Certificate re ment may be punishable by f	or, engineer, or architect authoriz presents my best efforts to inter fine or imprisonment under 18 U.	ed by law to certify elevoret the data available. S. Code, Section 1001.	vation
Check here if comments are	provided on back of form.			PLACE
Certifier's Name		License Nur	nber	SEAL
Title	Company Name	9		
Addross	City	State	ZID Codo	
Audress	City	State	ZIP Code	

IMPORTANT: In these snaces convit	he corresponding information from Sect	ion A	For Insurance Company Use
Building Street Address (including Apt., Unit,	Suite, and/or Bldg. No.) or P.O. Route and Box N	0.	Policy Number
	Ctoto .		
City	State		
SECTION D - S	URVEYOR, ENGINEER, OR ARCHITECT	CERTIFICATION (CO	NTINUED)
Copy both sides of this Elevation Certificate f	or (1) community official, (2) insurance agent/com	npany, and (3) building ov	vner.
Comments			
Signature	Date		
SECTION E - BUILDING ELEVATIO	ON INFORMATION (SURVEY NOT REQUI	RED) FOR ZONE AO	AND ZONE A (WITHOUT BFE)
<ul> <li>For Zones AO and A (without BFE), complete and C. For Items E1-E4, use natural grade,</li> <li>E1. Provide elevation information for the fol grade (HAG) and the lowest adjacent g a) Top of bottom floor (including basem b) Top of bottom floor (including basem celevation C2.b in the diagrams) of the</li> <li>E3. Attached garage (top of slab) is</li> <li>E4. Top of platform of machinery and/or eq</li> <li>E5. Zone AO only: If no flood depth number ordinance? Yes No</li> </ul>	e Items E1-E5. If the Certificate is intended to su if available. Check the measurement used. In Po- llowing and check the appropriate boxes to show rade (LAG). nent, crawl space, or enclosure) is ent, crawl space, or enclosure) is ent flood openings provided in Section A Items 8 building is feet meters feet meters above or uipment servicing the building is [ er is available, is the top of the bottom floor elevat nown. The local official must certify this informati	pport a LOMA or LOMR-f uerto Rico only, enter met whether the elevation is a feet meters a and/or 9 (see page 8 of I above or below below the HAG. feet meters a ed in accordance with the ion in Section G.	F request, complete Sections A, B, ters. above or below the highest adjacent above or below the hAG. above or below the LAG. nstructions), the next higher floor the HAG. above or below the HAG. above or below the HAG.
			FICATION
The property owner or owner's authorized rer	presentative who completes Sections A B and E	for Zone A (without a FE	
or Zone AO must sign here. The statements Property Owner's or Owner's Authorized Rep	in Sections A, B, and E are correct to the best of resentative's Name	my knowledge.	
Address	City	State	ZIP Code
Signature	Date	Telepho	one
Comments			
			Check here if attachments
The local official who is authorized by law or or	dinance to administer the community's floodplain	management ordinance	can complete Sections A, B, C (or E),
and G of this Elevation Certificate. Complete t	he applicable item(s) and sign below. Check the	measurement used in Ite	ms G8. and G9.
G1. The information in Section C was tak is authorized by law to certify elevation	ten from other documentation that has been signed on information. (Indicate the source and date of t	ed and sealed by a licens he elevation data in the C	ed surveyor, engineer, or architect who Comments area below.)
G2. G2. G3. G3. G3. G3. G4. G5. G5. G6. G6. G6. G7. G7. G7. G7. G7. G7. G7. G7. G7. G7	ion E for a building located in Zone A (without a F -G9.) is provided for community floodplain manag	ement purposes.	ty-issued BFE) or Zone AO.
G4. Permit Number G5.	Date Permit Issued G6.	Date Certificate Of Com	pliance/Occupancy Issued
G7. This permit has been issued for:	w Construction	t	
G8. Elevation of as-built lowest floor (including	basement) of the building:		PR) Datum
G9. BFE or (In Zone AO) depth of flooding at th	ne building site:	☐ feet ☐ meters (I	PK) Datum
Local Official's Name	Title		
Community Name	Telephon	e	
Signature	Date		
Comments			
			Check here if attachments

## Building Photographs See Instructions for Item A6.

			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 using the Elevation Certificate to obtain NFIP flood insurance, affix at least two building photographs below according to the instructions for Item A6. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." If submitting more photographs than will fit on this page, use the Continuation Page, following.

# Building Photographs Continuation Page

			For Insurance Company Use:
Building Street Address (including	dress (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.		
5 (	5   · · · · · · · · · · · · · · · · · ·		
City	State	ZIP Code	Company NAIC Number
, ,			

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View."

## 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/AE, AR/AI-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 http://www.fema.gov/fema/csb.shtm, 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 non-profit 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.