

City of Rifle
Floodplain Development Permit Information

Regulation of all development in floodplains is essential because fill or other material can obstruct flood flows just as structures can. A permit is required for almost any development-related change to the floodplain, including but not limited to: *construction of new structures, modifications or improvements to existing structures, excavation, filling, paving, drilling, driving piles, mining, dredging, clearing, grading, permanent storage of materials and/or equipment.*

Projects not requiring a permit include but are not limited to: *planting a garden, farming, putting up a mailbox, erecting a flagpole, re-roofing, replacing siding.*

A floodplain development permit is required only if the development is located within the Special Flood Hazard Area (SFHA.) For example, while the applicant's property may be located partially in the SFHA, the proposed structure could be built on land outside the SFHA. In this case, floodplain regulations would not apply and no special floodplain development permit is needed. However, if clearing, grading, filling, or road or bridge construction associated with erecting the structure is within the SFHA, a permit is necessary.

Why do we regulate the floodplain?

To protect people and property – Floodplain management is about building smart. It makes good sense. If we know part of our land will flood from time to time, we should make reasonable decisions to help protect our families, homes, and businesses.

To make sure that federal flood insurance and disaster assistance are available – If your home or business is in the floodplain, and federal flood insurance isn't available, then you can't get some types of federal financial assistance. Home mortgages will be hard to find, and you won't be able to get some types of state and federal loans and grants.

To save tax dollars – Every flood disaster affects your community's budget. If we build smarter, we'll have fewer problems the next time the river rises. Remember that federal disaster assistance isn't available for all floods. And even when the President declares a disaster, your community still has to pay a lot to cover the costs of evacuation, temporary housing, repairs, and clean-up.

To avoid liability and law suits – If we know an area is mapped as floodplain and likely to flood, if we know people could be in danger, and if we know that buildings could be damaged, it makes sense to take reasonable protective steps when we develop and build.

To reduce future flood losses – Floodplain development regulations are simply a "good neighbor" policy designed to protect our citizens from future flood losses. It is illegal to do any floodway activity that may increase or divert flood waters onto neighboring properties. This helps keep flooding conditions from getting worse as more and more development takes place.

**CITY OF RIFLE
FLOODPLAIN DEVELOPMENT PERMIT APPLICATION CHECKLIST**

Please submit the following for a complete application.

Four (4) packets including the following:

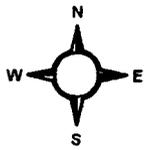
- An application form signed by the owner(s) of the property. If the applicant is not the owner(s), then a letter of consent needs to be submitted with the application allowing the applicant to represent the owner(s)
- Proof of legal ownership and the names and addresses of the owners and any lienholder(s)
- Vicinity Map
- Site plan showing:
 - Location of property lines
 - Location and dimensions of all existing and proposed structures
 - Location and dimensions of all existing and proposed paved surfaces
 - Location and dimensions of all existing and proposed earth work
 - Location and dimensions of all existing and proposed easements
 - Location and dimensions of all existing and proposed outdoor storage
 - Location of all existing and proposed utilities
 - Location of floodway and floodway fringe
 - Base flood elevation contour
 - Contour elevations at 2 foot intervals
 - Legal description and address
 - Drainage plan
- Building plans showing:
 - Base flood elevation
 - Lowest floor elevation (including basement)
 - Floodproofing elevation (non-residential only)
 - Structural anchoring
- Floodway certification and data certifying no increase in flood height

If any part of the proposed project is to be located in a designated floodway, the applicant must submit an engineering certification and documentation demonstrating that the proposed encroachment would not result in any increase in base flood heights. If the project is in a floodplain where no floodway has been adopted, the certification would show that there the project will not exceed the allowable increase a flood heights. This certification could be the same as the No-Rise Certification example provided.
- Floodproofing certification of design and method of construction

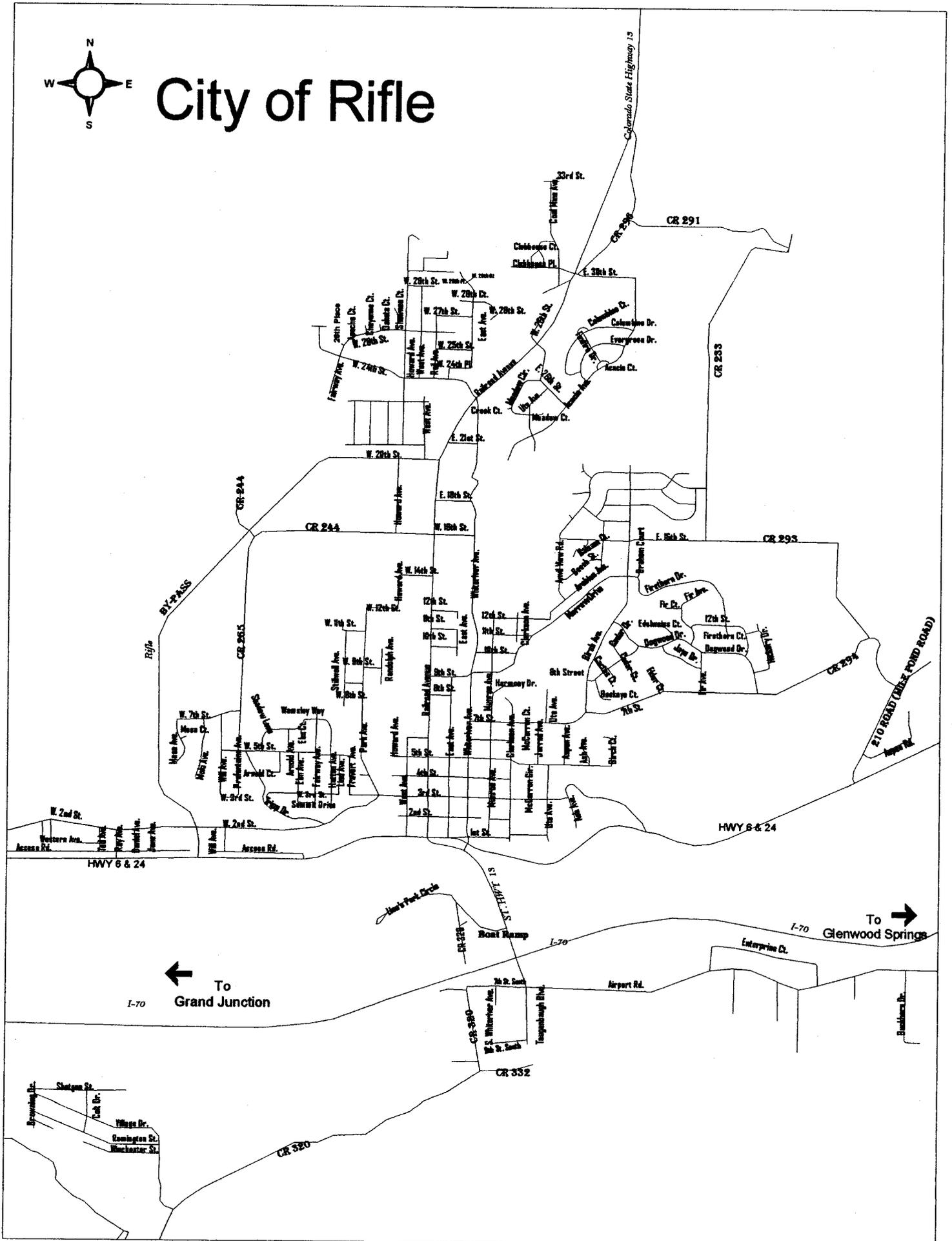
In the event a nonresidential structure is to be floodproofed, the applicant must submit a statement from a registered professional engineer or architect certifying that the design and methods of construction meet these standards.

Other Materials

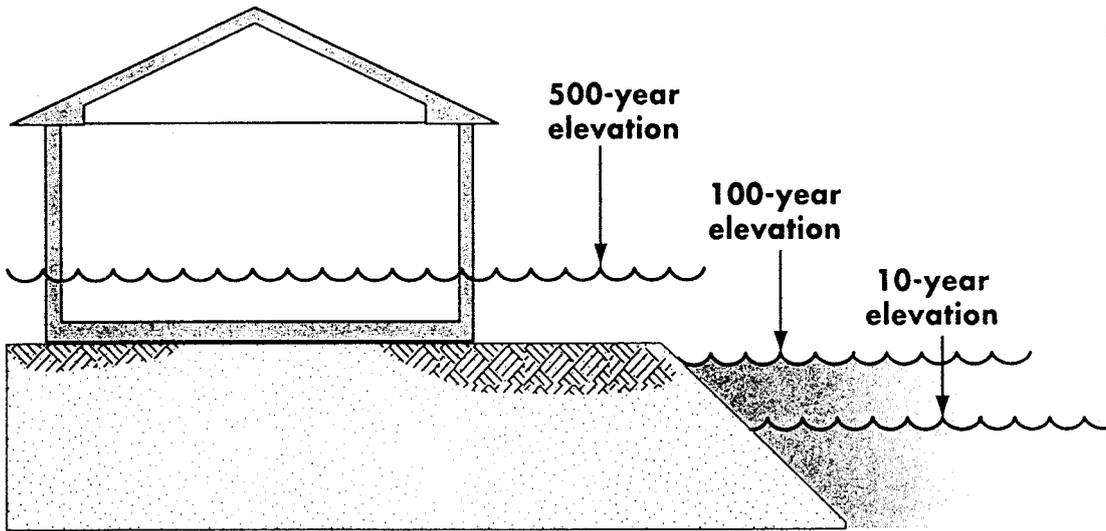
City staff may request other materials deemed necessary for the review of a specific case.



City of Rifle



Nature Doesn't Read Maps



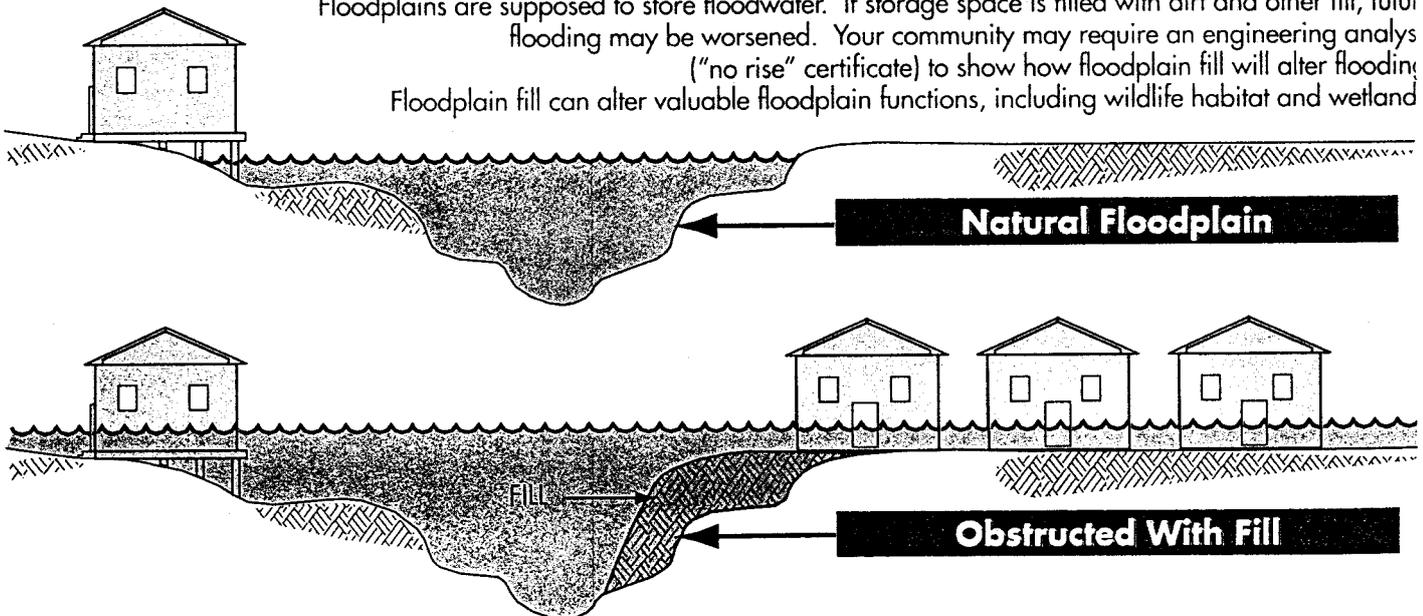
Important Information

Many people don't understand just how risky the floodplain can be. There is a 26% chance that a non-elevated home in the floodplain will be damaged during a 30-year mortgage period. The chance that a major fire will occur during the same period is only 1%!

CAUTION! Nature doesn't read the flood map! Major storms and flash floods can cause flooding that rises higher than the 100-year elevation (BFE). Consider safety – protect your home or business by building higher. See page 23 to see how this will save you money on insurance.

Floodplain Fill Can Make Things Worse

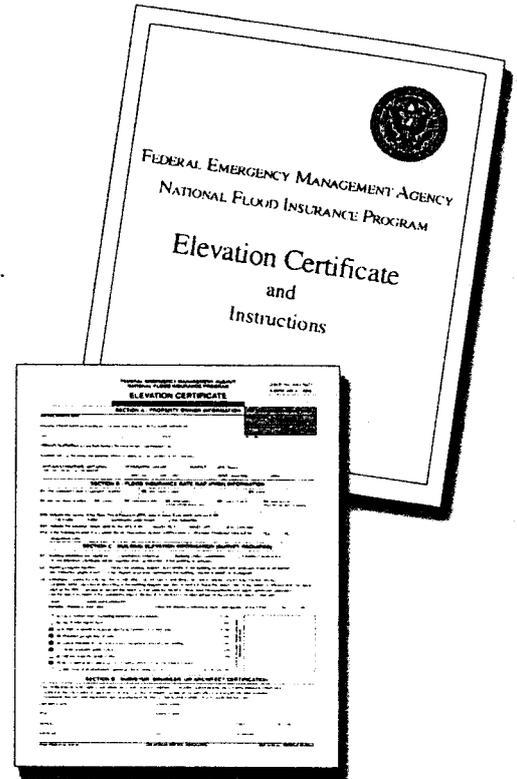
Floodplains are supposed to store floodwater. If storage space is filled with dirt and other fill, future flooding may be worsened. Your community may require an engineering analysis ("no rise" certificate) to show how floodplain fill will alter flooding. Floodplain fill can alter valuable floodplain functions, including wildlife habitat and wetland.



Make sure your floodplain fill project won't harm your neighbors. Floodway fill is allowed **only** if an engineering evaluation demonstrates that "no-rise" in flood level will occur (see page 28).

What is the Elevation Certificate and How is it Used?

- The Elevation Certificate (EC) is a FEMA form, download a copy from <http://www.fema.gov/library/elvcert.pdf>
- The EC must be completed and sealed by a registered surveyor or engineer when the floodplain has BFEs.
- A community official may complete the EC for sites in approximate flood zones.
- It can be used to show that sites are natural ground above the Base Flood Elevation (see page 17).
- It is used to verify that buildings are elevated properly (see page 25).
- Insurance agents use the EC to write flood insurance policies.
- By itself, the EC cannot be used to waive the requirement to get flood insurance. See page 14 to learn about Letters of Map Amendment.



Completing the Elevation Certificate

ELEVATION CERTIFICATE (partial)
Important: Read the instructions on pages 1-7

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

Elevation reference mark used B.M. 166. Does the elevation reference mark used appear on the FIRM? Yes No

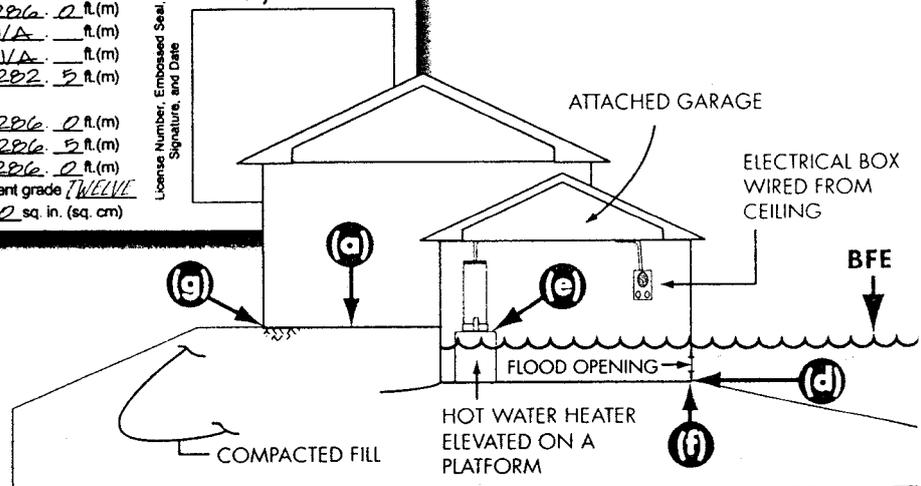
<input type="checkbox"/> a) Top of bottom floor (including basement or enclosure)	<u>4,286.0</u> ft.(m)
<input type="checkbox"/> b) Top of next higher floor	<u>N/A</u> ft.(m)
<input type="checkbox"/> c) Bottom of lowest horizontal structural member (V zones only)	<u>N/A</u> ft.(m)
<input type="checkbox"/> d) Attached garage (top of slab)	<u>4,282.5</u> ft.(m)
<input type="checkbox"/> e) Lowest elevation of machinery and/or equipment servicing the building	<u>4,286.0</u> ft.(m)
<input type="checkbox"/> f) Lowest adjacent grade (LAG)	<u>4,286.0</u> ft.(m)
<input type="checkbox"/> g) Highest adjacent grade (HAG)	<u>4,286.0</u> ft.(m)
<input type="checkbox"/> h) No. of permanent openings (flood vents) within 1 ft. above adjacent grade	<u>TWELVE</u>
<input type="checkbox"/> i) Total area of all permanent openings (flood vents) in C3h	<u>1,280</u> sq. in. (sq. cm)

License Number, Embossed Seal, Signature, and Date

Elevation Certificate (partial)

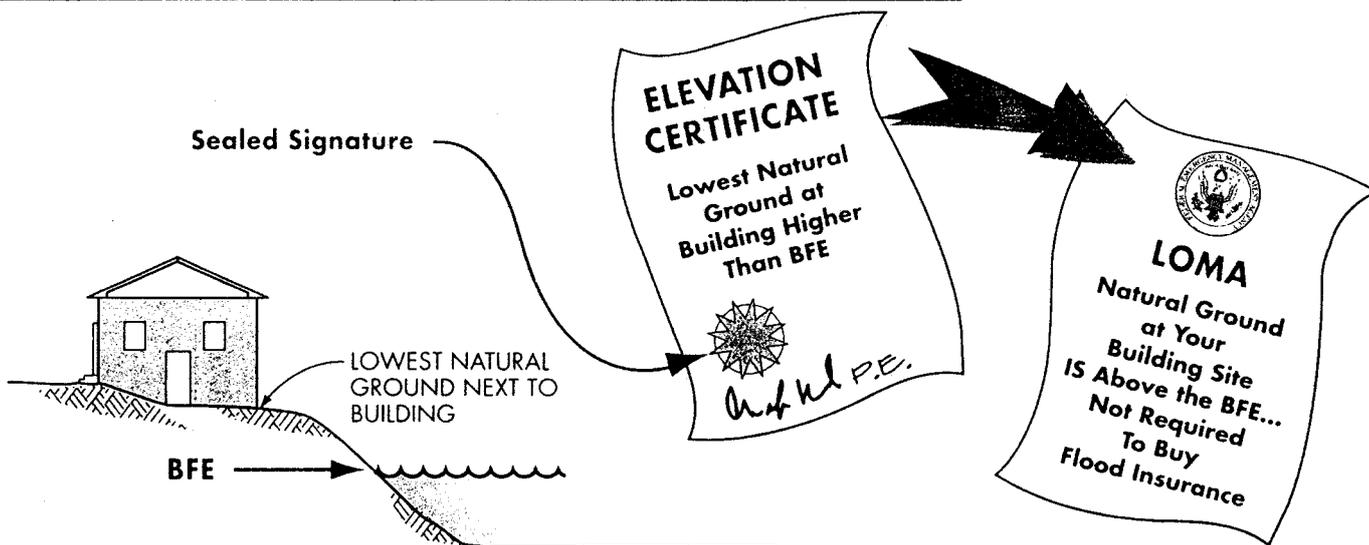
In this example, the BFE is 4,285.

The slab-on-grade house was elevated on fill 1' above the BFE, and the vented garage is 2.5' below the BFE.



You will get a blank Elevation Certificate form when you get your permit. You **must** have a surveyor or engineer fill it out and seal it. The Elevation Certificate includes diagrams for eight buildings types. Several points must be surveyed.

Is Your Building Site Higher than the BFE?



If your land is shown on the map as "in" the floodplain, but your building site is higher than the Base Flood Elevation (BFE)... get a surveyor or engineer to complete a FEMA Elevation Certificate (EC). Submit the EC with an application to FEMA and a Letter of Map Amendment may be issued (page 14).

This is the **ONLY** way to remove the requirement to buy flood insurance.

Keep the certificate with your deed, it will help future buyers.

The Floodway "No Rise" Certification

- Floodways can be dangerous because water may flow very fast
- Development is not allowed unless "no rise" in flood levels is certified
- An engineer must evaluate the hydraulic impact of proposed development
- A "no rise" certification must be signed, sealed, and dated by a registered professional engineer
- Check with CWCB for guidance before you decide to work in a floodway

ENGINEERING "NO-RISE" CERTIFICATION <i>(example)</i>	
 NATIONAL FLOOD INSURANCE PROGRAM	This is to certify that I am a duly qualified engineer licensed to practice in the State of Colorado. It is to further certify that the attached technical data supports the fact that proposed (Name of Development) will not impact the Base Flood Elevations (100-year flood), floodway elevations and the floodway widths on (Name of Stream) .
Signature _____	Seal _____

The engineering analysis must be based on technical data obtained from FEMA.
Save time and money – don't build in the floodway!



Avoiding Flood Damage: A Checklist for Homeowners

FEDERAL EMERGENCY MANAGEMENT AGENCY

Are you looking for ways to protect your home from flooding? There are many things you can do, depending on the flood hazard in your area, the characteristics of your property, and the zoning and building codes in your community. Some methods are fairly simple and inexpensive; others will require a professional contractor.

This homeowner's checklist will help you become familiar with what you can do. For more information about the costs and benefits of each method, talk to a professional builder, architect or contractor. You should also ask your building department about building permit requirements.

◆ Do you know your flood risk?

Call your local emergency management office, building department or floodplain management office for information about flooding. Ask to see a flood map of your community. There may be a projected flood elevation for your neighborhood. This information will help you determine how much water is likely to come in.

◆ Do you have enough flood insurance?

Even if you have taken steps to protect your home from flooding, you still need flood insurance if you live in a floodplain. Homeowners' policies do not cover flood damage, so you will probably need to purchase a separate policy under the National Flood Insurance Program (NFIP).

It takes 30 days for a flood policy to take effect. This is why you need to purchase flood insurance before flooding occurs.

If your insurance agent is unable to write a flood policy, call 1-800-638-6620 for information.

◆ Is the main electric switch-box located above potential flood waters?

The main electric panel board (electric fuses or circuit breakers) should be at least 12" above the projected flood elevation for your home. The panel board height is regulated by code. All electrical work should be done by a licensed electrician.

◆ Are electric outlets and switches located above potential flood waters?

Consider elevating all electric outlets, switches, light sockets, baseboard heaters and wiring at least 12" above the projected flood elevation for your home.

You may also want to elevate electric service lines (at the point they enter your home) at least 12" above the projected flood elevation.

In areas that could get wet, connect all receptacles to a ground fault interrupter (GFI) circuit to avoid the risk of shock or electrocution.

Have electrical wiring done by a licensed electrician.

◆ Are the washer and dryer above potential flood waters?

For protection against shallow flood waters, the washer and dryer can sometimes be elevated on masonry or pressure-treated lumber at least 12" above the projected flood elevation. Other options are moving the washer and dryer to a higher floor, or building a floodwall around the appliances.

◆ Are the furnace and water heater above potential flood waters?

The furnace and water heater can be placed on masonry blocks or concrete at least 12" above the projected flood elevation, moved to inside a floodwall or moved to a higher floor. (You have more

options for protecting a new furnace. Ask your utility about rebates for new energy efficient furnaces. The rebate plus the savings in fuel costs could make the purchase feasible.)

Furnaces that operate horizontally can be suspended from ceiling joists if the joists are strong enough to hold the weight. Installing a draft-down furnace in the attic may be an option if allowed by local codes. Some heating vents can be located above the projected flood elevation.

Outside air conditioning compressors, heat pumps or package units (single units that include a furnace and air conditioner) can be placed on a base of masonry, concrete or pressure treated lumber.

All work must conform to state and local building codes.

◆ **Is the fuel tank anchored securely?**

A fuel tank can tip over or float in a flood, causing fuel to spill or catch fire. Cleaning up a house that has been inundated with flood waters containing fuel oil can be extremely difficult and costly.

Fuel tanks should be securely anchored to the floor. Make sure vents and fill line openings are above projected flood levels.

Propane tanks are the property of the propane company. You'll need written permission to anchor them. Ask whether the company can do it first.

Be sure all work conforms to state and local building codes.

◆ **Does the floor drain have a float plug?**

Install a floating floor drain plug at the current drain location.

If the floor drain pipe backs up, the float will rise and plug the drain.

◆ **Does the sewer system have a backflow valve?**

If flood waters enter the sewer system, sewage can back up and enter your home. To prevent this, have a licensed plumber install an interior or exterior backflow valve. Check with your building department for permit requirements.

You may have other options for avoiding flood damage depending on your needs and financial resources. These include building drainage systems around the property, sealing openings such as low windows, building levees, constructing exterior floodwalls around basement doors and window wells, improving exterior walls, elevating buildings above projected flood levels and relocating buildings away from floodplains.

For more information, talk to a professional builder, architect or contractor. Ask your building department about building permit requirements.

“NO-RISE” CERTIFICATION

This is to certify that I am a duly qualified registered professional engineer licensed to practice in the State of _____.

It is further to certify that the attached technical data supports the fact that proposed _____ (Name of Development) will not impact the 100-year flood elevations, floodway elevations, or floodway widths on _____ (Name of Stream) at published sections in the Flood Insurance Study for the City of Rifle, Garfield County, Colorado, dated _____ (Study Date) and will not impact the 100-year flood elevations, floodway elevations, or floodway widths at unpublished cross-sections in the vicinity of the proposed development.

Attached are the following documents that support my findings

Date: _____

Signature: _____

Title: _____

{Seal}



FEMA

FEDERAL EMERGENCY MANAGEMENT AGENCY

NATIONAL FLOOD INSURANCE PROGRAM

ELEVATION CERTIFICATE

AND

INSTRUCTIONS

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

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1 - 7.

SECTION A - PROPERTY OWNER INFORMATION		For Insurance Company Use:
BUILDING OWNER'S NAME		Policy Number
BUILDING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO.		Company NAIC Number
CITY	STATE	ZIP CODE
PROPERTY DESCRIPTION (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)		
BUILDING USE (e.g., Residential, Non-residential, Addition, Accessory, etc. Use a Comments area, if necessary.)		
LATITUDE/LONGITUDE (OPTIONAL) (##° - ##' - ##.##" or ##.####°)	HORIZONTAL DATUM: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983	SOURCE: <input type="checkbox"/> GPS (Type): _____ <input type="checkbox"/> USGS Quad Map <input type="checkbox"/> Other _____

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP COMMUNITY NAME & COMMUNITY NUMBER		B2. COUNTY NAME		B3. STATE	
B4. MAP AND PANEL NUMBER	B5. SUFFIX	B6. FIRM INDEX DATE	B7. FIRM PANEL EFFECTIVE/REVISED DATE	B8. FLOOD ZONE(S)	B9. BASE FLOOD ELEVATION(S) (Zone AO, use depth of flooding)

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in B9.
 FIS Profile FIRM Community Determined Other (Describe): _____

B11. Indicate the elevation datum used for the BFE in B9: NGVD 1929 NAVD 1988 Other (Describe): _____

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

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: Construction Drawings* Building Under Construction* Finished Construction
 *A new Elevation Certificate will be required when construction of the building is complete.

C2. Building Diagram Number _____ (Select the building diagram most similar to the building for which this certificate is being completed - see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)

C3. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO
 Complete Items C3.a-i below according to the building diagram specified in Item C2. State the datum used. If the datum is different from the datum used for the BFE in Section B, convert the datum to that used for the BFE. Show field measurements and datum conversion calculation. Use the space provided or the Comments area of Section D or Section G, as appropriate, to document the datum conversion.
 Datum _____ Conversion/Comments _____

Elevation reference mark used _____ Does the elevation reference mark used appear on the FIRM? Yes No

a) Top of bottom floor (including basement or enclosure) _____ ft.(m)

b) Top of next higher floor _____ ft.(m)

c) Bottom of lowest horizontal structural member (V zones only) _____ ft.(m)

d) Attached garage (top of slab) _____ ft.(m)

e) Lowest elevation of machinery and/or equipment servicing the building (Describe in a Comments area.) _____ ft.(m)

f) Lowest adjacent (finished) grade (LAG) _____ ft.(m)

g) Highest adjacent (finished) grade (HAG) _____ ft.(m)

h) No. of permanent openings (flood vents) within 1 ft. above adjacent grade _____

i) Total area of all permanent openings (flood vents) in C3.h _____ sq. in. (sq. cm)

License Number, Embossed Seal, Signature, and Date

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information.
 I certify that the information in Sections A, B, and C on this certificate represents my best efforts to interpret the data available.
 I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

CERTIFIER'S NAME	LICENSE NUMBER
TITLE	COMPANY NAME
ADDRESS	CITY STATE ZIP CODE
SIGNATURE	DATE TELEPHONE

IMPORTANT: In these spaces, copy the corresponding information from Section A.			For Insurance Company Use:
BUILDING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO.			Policy Number
CITY	STATE	ZIP CODE	Company NAIC Number

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

COMMENTS

|_| Check here if attachments

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

For Zone AO and Zone A (without BFE), complete Items E1. through E5. If the Elevation Certificate is intended for use as supporting information for a LOMA or LOMR-F, Section C must be completed.

- E1. Building Diagram Number ____ (Select the building diagram most similar to the building for which this certificate is being completed – see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)
- E2. The top of the bottom floor (including basement or enclosure) of the building is |_|_| ft. (m) |_|_| in. (cm) |_| above or |_| below (check one) the highest adjacent grade. (Use natural grade, if available.)
- E3. For Building Diagrams 6-8 with openings (see page 7), the next higher floor or elevated floor (elevation b) of the building is |_|_| ft. (m) |_|_| in. (cm) above the highest adjacent grade. Complete Items C3.h and C3.i on front of form.
- E4. The top of the platform of machinery and/or equipment servicing the building is |_|_| ft. (m) |_|_| in. (cm) |_| above or |_| below (check one) the highest adjacent grade. (Use natural grade, if available.)
- E5. For Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? |_| Yes |_| No |_| Unknown. The local official must certify this information in Section G.

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

The property owner or owner's authorized representative who completes Sections A, B, C (Items C3.h and C3.i only), and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. *The statements in Sections A, B, C, and E are correct to the best of my knowledge.*

PROPERTY OWNER'S OR OWNER'S AUTHORIZED REPRESENTATIVE'S NAME

ADDRESS CITY STATE ZIP CODE

SIGNATURE DATE TELEPHONE

COMMENTS

|_| Check here if attachments

SECTION G - COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below.

- G1. |_| The information in Section C was taken from other documentation that has been signed and embossed by a licensed surveyor, engineer, or architect who is authorized by state or local law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)
- G2. |_| A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3. |_| The following information (Items G4-G9) is provided for community floodplain management purposes.

G4. PERMIT NUMBER	G5. DATE PERMIT ISSUED	G6. DATE CERTIFICATE OF COMPLIANCE/OCCUPANCY ISSUED
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G7. This permit has been issued for: |_| New Construction |_| Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building is: _____ . ____ ft. (m) Datum: _____

G9. BFE or (in Zone AO) depth of flooding at the building site is: _____ . ____ ft. (m) Datum: _____

LOCAL OFFICIAL'S NAME TITLE

COMMUNITY NAME TELEPHONE

SIGNATURE DATE

COMMENTS

|_| Check here if attachments

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.

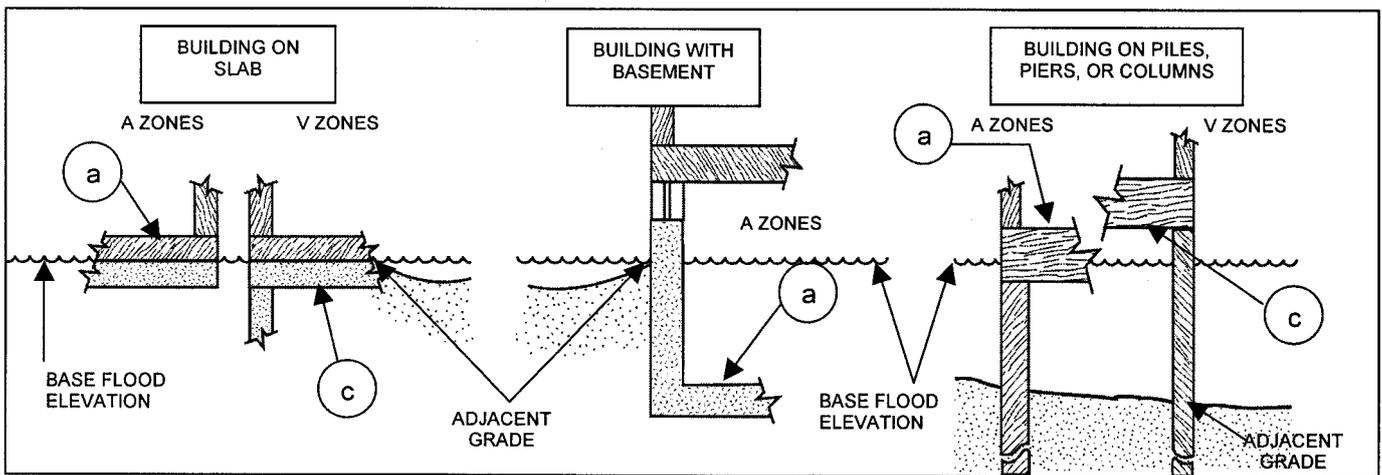
Item C1. Indicate whether the elevations to be entered in this section are based on construction drawings, a building under construction, or finished construction. For either of the first two choices, a post-construction Elevation Certificate will be

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.

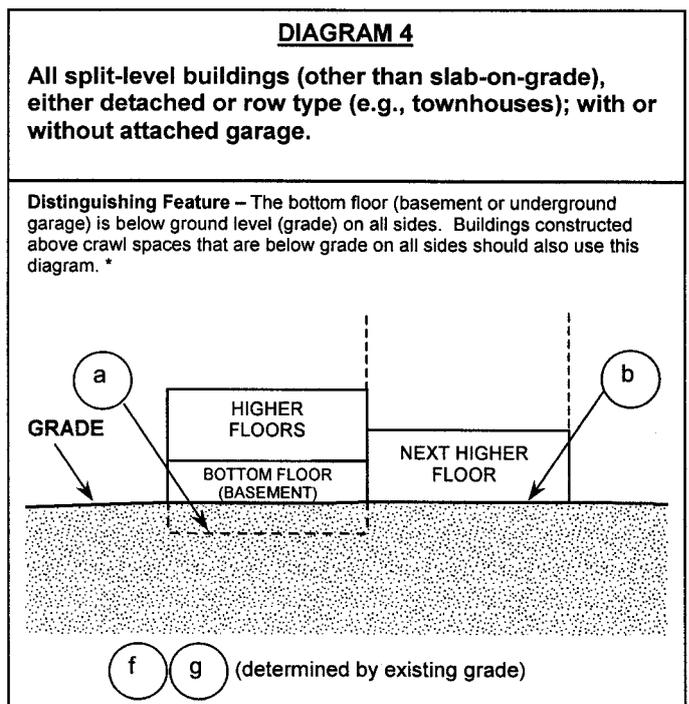
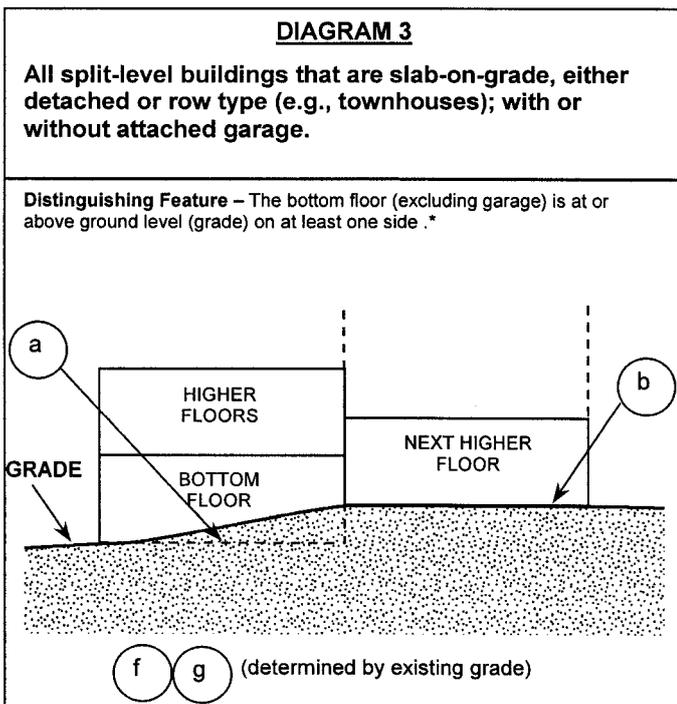
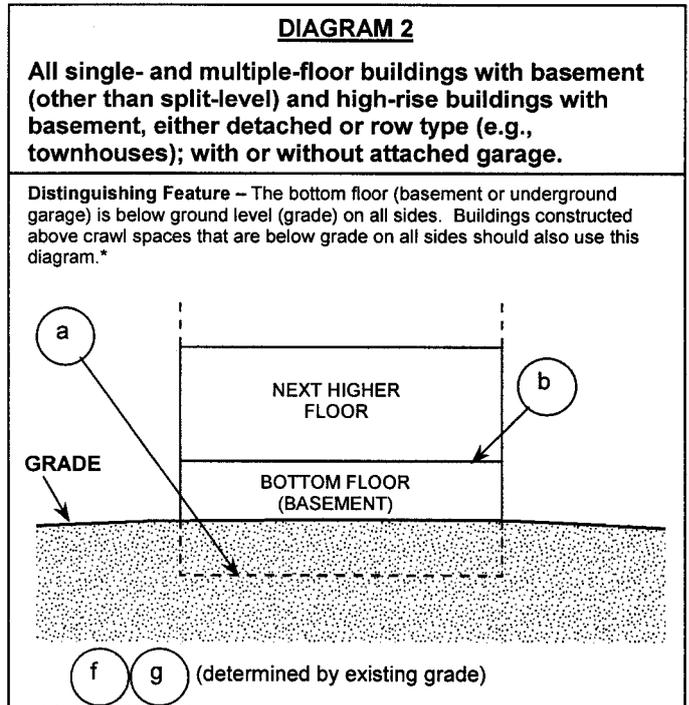
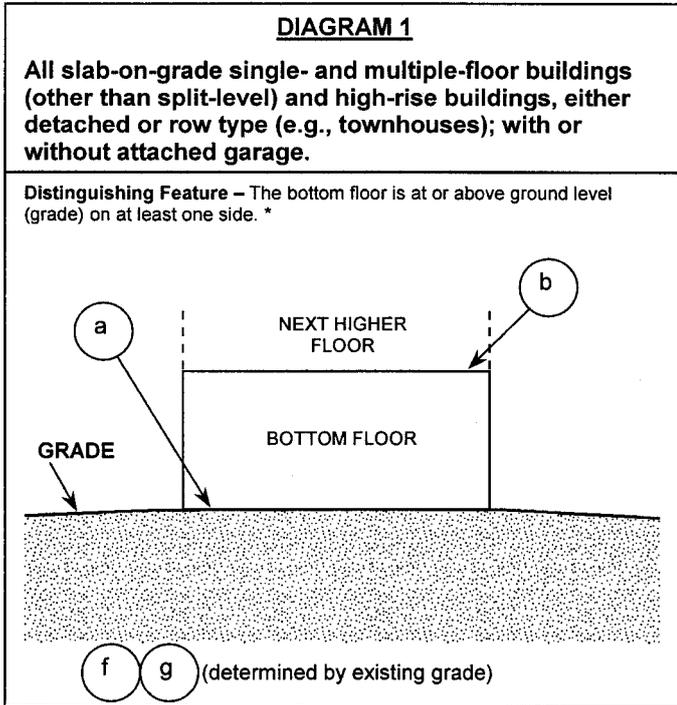
Item G9. BFE. Using the appropriate FIRM panel, FIS, or other data source, locate the property and enter the BFE (or base flood depth) of the building site. Indicate the elevation datum used.

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.

DIAGRAM 5

All buildings elevated on piers, posts, piles, columns, or parallel shear walls. No obstructions below the elevated floor.

Distinguishing Feature – For all zones, the area below the elevated floor is open, with no obstruction to flow of flood waters (open lattice work and/or readily removable insect screening is permissible).

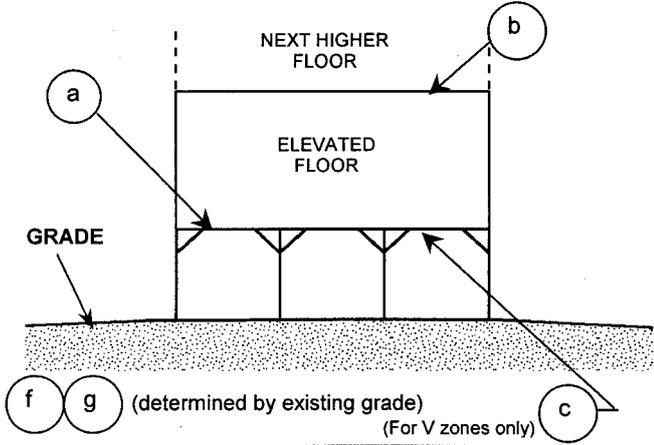


DIAGRAM 6

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

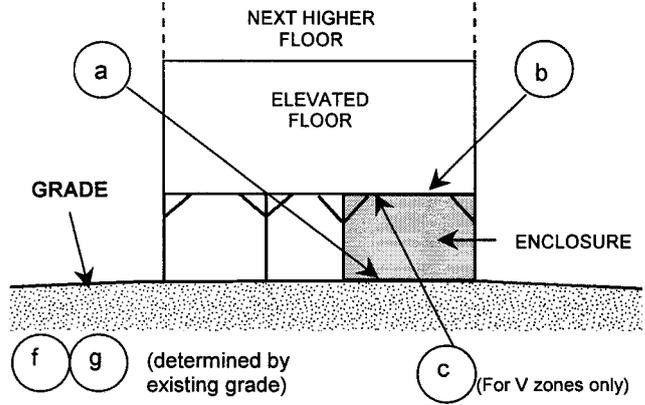


DIAGRAM 7

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).

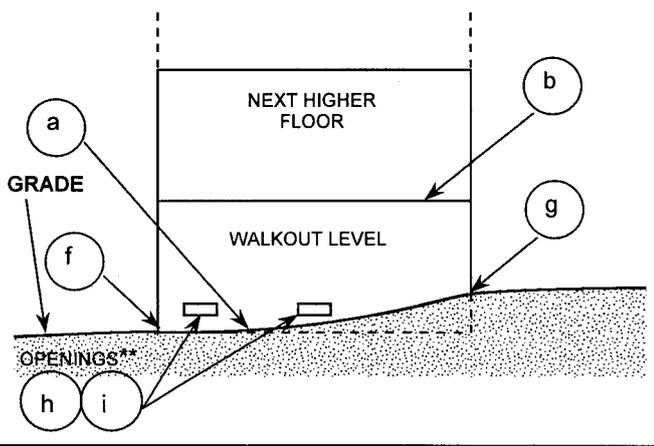
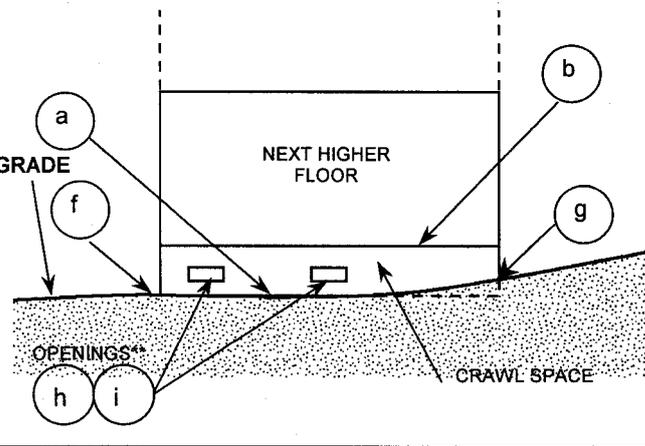


DIAGRAM 8

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.

Distinguishing Feature – For all zones, the area below the first floor is enclosed 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).



** 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.