

# Federal Emergency Management Agency National Flood Insurance Program

## ELEVATION CERTIFICATE

AND

Instructions



BLOG #5

#### PAPERWORK BURDEN DISCLOSURE NOTICE

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

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

DISCLOSURE OF BURDEN - Public reporting burden for the collection of information entitled "Post-Construction Elevation Certificate/Floodproofing Certificate" (FEMA Form 81-31 and 81-65) is estimated to average 12 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the forms. Send comments regarding the burden estimate or any aspect of the collection, including suggestions for reducing the burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W. 20472; and to the Office of Management and Budget, Paperwork Reduction Project (3067-0077), Washington, D.C. 20503.

#### **ELEVATION CERTIFICATE**

### FEDERAL EMERGENCY MANAGEMENT AGENCY NATIONAL FLOOD INSURANCE PROGRAM

ATTENTION: Use of this certificate does not provide a waiver of the flood insurance purchase requirement. This form is used only to provide elevation information necessary to ensure compliance with applicable community floodplain management ordinances, to determine the proper insurance premium rate, and/or to support a request for a Letter of Map Amendment or Revision (LOMA or LOMR).

Instructions for completing this form can be found on the following pages.

	OFOTION A DD	ODEDTY INCO	CMATION	7	
	SECTION A PR	OPERTY INFO	HMATION		FOR INSURANCE COMPANY USE
BUILDING OWNER'S NAME	natrustion Com				POLICY NUMBER
Portrait Homes Co STREET ADDRESS (Including A			ROUTE AND BOX NUMBER		COMPANY NAIC NUMBER
6301, 6303, 6305,	6307, 6309, 6	311 & 6315	Creek Crossing T	rai <mark>l;</mark> Bldg 5	
OTHER DESCRIPTION (Lot and		n1 1 17	ć . <del>.</del>	demonstratification of	
P/O Guilford Cour	ity ACL-18-11/5	, Block 1/	6, Lot 22	STATE	710 0005
Stoney Creek				NC	ZIP CODE
	SECTION B FI	OOD INSURA	NCE RATE MAP (FIRM)	INFORMATION	
Provide the following from t	he proper FIRM (See	Instructions):			
1. COMMUNITY NUMBER	2. PANEL NUMBER	3. SUFFIX	4. DATE OF FIRM INDEX	5. FIRM ZONE	6. BASE FLOOD ELEVATION (in AO Zones, use depth)
370111	0145	В	6/14/1980	x (shaded)	599.0
					Other (describe on back)
8. For Zones A or V, where					or this building site, indicate
the community's BFE:	feet N	GVD (or other	FIRM datum-see Section	n B, Item 7)	
	SECTION	ON C BUILDII	NG ELEVATION INFORM	MATION	
of 606.3 fee (b). FIRM Zones V1-V30, the selected diagram, (c). FIRM Zone A (without below (check one) (d). FIRM Zone AO. The fone) the highest grade level) elevated in acco 3. Indicate the elevation dat under Comments on Pag	illding's reference lever AE, AH, and A (with E AE, AH, and A (with E AE, AH, and A (with E AE, AH, and A (with BFE) and V (with BFE). The floor used the highest grade additional and additional and ance with the common system used in die 2). (NOTE: If the AE, Item 7], then converts on Page 2.)	BFE). The top of the series of the bottom of the series of the bottom of the series of	of the reference level floor Section B, Item 7). If the lowest horizontal still feet NGVD (or other FIF ince level from the selected uilding. In the selected diagram is depth number is available ain management ordinance above reference level element of the datum system used in the selected in the	ructural member of M datum-see Sed diagram is feet able, is the building's vations: X NGV elevations is differenced on the FIRM of Page 4)	ed diagram is at an elevation of the reference level from action B, Item 7). If eet above or or or below (check is lowest floor (reference) No Unknown D'29 Other (describe) ent than that used on
(NOTE: Use of constructions this certificate will or will be required once cons	tion drawings i <mark>s only v</mark> nly be valid for the bui struction is complete.)	valid if the build Iding during the	ling does not yet have the course of construction.	e reference level f A post-constructi	on Elevation Certificate
6. The elevation of the lowe Section B, Item 7).	st grade immediately	adjacent to the	building is:     6  96	. O feet NGVD (	or other FIRM datum-see
	SE	CTION D CO	MMUNITY INFORMATIO	N	
If the community official r is not the "lowest floor" as floor" as defined by the o.     Date of the start of construction	s defined in the comm rdinance is:	unity's floodpla	in management ordinand GVD (or other FIRM datu	e, the elevation o	of the building's "lowest

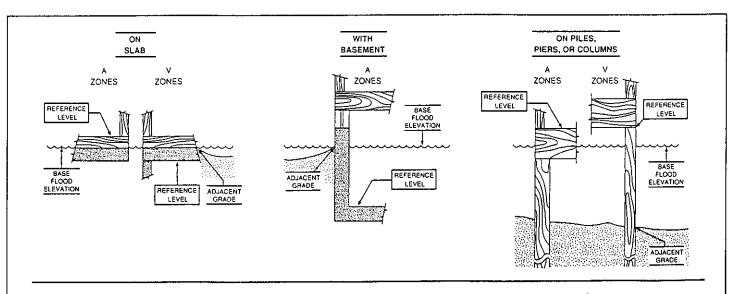
#### SECTION E CERTIFICATION

This certification is to be signed by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information when the elevation information for Zones A1–A30, AE, AH, A (with BFE),V1–V30,VE, and V (with BFE) is required. Community officials who are authorized by local law or ordinance to provide floodplain management information, may also sign the certification. In the case of Zones AO and A (without a FEMA or community issued BFE), a building official, a property owner, or an owner's representative may also sign the certification.

Reference level diagrams 6, 7 and 8 - Distinguishing Features—If the certifier is unable to certify to breakaway/non-breakaway wall, enclosure size, location of servicing equipment, area use, wall openings, or unfinished area Feature(s), then list the Feature(s) not included in the certification under Comments below. The diagram number, Section C, Item 1, must still be entered.

I certify that the information in Sections 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 (or	r Affix Seal)	
Vincent C. Townsend	P.E. 23951		
TITLE	COMPANY NAME		
Project Engineer	Evans Engineering, Inc	2.	
ADDRESS	CITY	STATE	ZIP
4609 Dundas Drive	Greensboro	NC	27407
SIGNATURE.	12/16/49	PHONE (336)_854-88	77
COMMENTS:	Marine.		
E CORESSION			
\$ SEAL			
SEAL 23951			



The diagrams above illustrate the points at which the elevations should be measured in A Zones and V Zones.

Elevations for all A Zones should be measured at the top of the reference level floor.

Elevations for all V Zones should be measured at the bottom of the lowest horizontal structural member.

## THE NATIONAL FLOOD INSURANCE PROGRAM ELEVATION CERTIFICATE

#### PURPOSE OF THE ELEVATION CERTIFICATE

The Elevation Certificate is an important administrative tool of the National Flood Insurance Program (NFIP).

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

The Elevation Certificate is also required to properly rate post-FIRM structures, which are buildings constructed after publication of the Flood Insurance Rate Map (FIRM), for flood insurance in FIRM Zones A1-A30, AE, AO, AH, A (with Base Flood Elevations [BFE's]), V1-V30, VE, and V (with BFE's). In addition, the Elevation Certificate is also needed for pre-FIRM structures being rated under post-FIRM flood insurance rules.

Use of this certificate does not in any way alter the flood insurance purchase requirement. The Elevation Certificate is only used to provide information necessary to ensure compliance with applicable community floodplain management ordinances, to determine the proper flood insurance premium rate, and/or to support a request for a Letter of Map Amendment or Revision (LOMA or LOMR). Only a LOMA or LOMR from the Federal Emergency Management Agency (FEMA) can amend the FIRM and remove the Federal requirement for a lending institution to require the purchase of flood insurance. Note that the lending institution may still require flood insurance.

This certificate is only used to certify the elevation of the reference level of a building. If a non-residential building is being floodproofed, then a Floodproofing Certificate must be completed in addition to certifying the building's elevation. Floodproofing of a residential building does not alter a community's floodplain management elevation requirements or affect the insurance rating unless the community has been issued an exception by FEMA to allow floodproofed residential basements.

#### INSTRUCTIONS FOR COMPLETING THE ELEVATION CERTIFICATE

The Elevation Certificate is to be completed by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information when the elevation information for Zones A1-A30, AE, AH, A (with BFE's), V1-V30, VE, and V (with BFE's) is required. Community officials who are authorized by local law or ordinance to provide floodplain management information may also complete this form. For Zones AO and A (without BFE's), a building official, a property owner, or an owner's representative may also provide the information on this certification.

#### SECTION A Property Information

The Elevation Certificate identifies the building, its owner and its location. Provide the building owner's name(s), the building's complete street address, and lot and block number. If the property address is a rural route or PO box number, provide a legal description or an abbreviated location description based on distance from a reference point.

#### SECTION B Flood Insurance Rate Map Information

In order to properly complete the Elevation Certificate, it is necessary to locate the building on the appropriate FIRM, and record the appropriate information. To obtain a FIRM, contact the community or call 1-800-333-1363.

The Elevation Certificate may be completed based on either the FIRM in effect at the time of the certification *or* the FIRM in effect when construction of the building was started.

Items 1 - 6. Using the FIRM Index and the appropriate FIRM panel for the community, record the community number, panel (or page) number, suffix, and Index date. From the appropriate FIRM panel, locate the property and record the zone and the BFE (or flood depth number) at the building site. BFE's are shown on a FIRM for Zones A1-A30, AE, AH, V1-V30, and VE; flood depth numbers are shown for Zone AO.

Item 7. Record the vertical datum system to which the elevations on the applicable FIRM are referenced. The datum is specified in the upper right corner of the title block of the FIRM.

Item 8. In A or V Zones where BFE's are not provided on the FIRM, the community may have established BFE's based on data from other sources. For subdivisions and other development greater than 50 lots or 5 acres, establishment of BFE's is required by community floodplain management ordinance. When this is the case, complete this item.

#### SECTION C Building Elevation Information

Item 1. The Elevation Certificate uses a building's reference level as the point for measuring its elevation. Pages 5 and 6 of this Elevation Certificate package contain a series of eight diagrams of various building types that are to be used to help determine the reference level. Choose the diagram that best represents this building, record the diagram number, and use the indicated reference level to measure the elevation as requested in Items 2a-d.

Item 2. Depending on the property location's FIRM Zone, complete Item 2a, 2b, 2c, or 2d. Use the reference level shown in the appropriate building diagram as the point of measurement. As shown in the diagram on the back of the Certificate, for all A Zones, the elevation should be measured at the top of the reference level floor. For all V Zones, the elevation should be measured at the bottom of the lowest horizontal structural member of the reference level floor. Reporting of elevations in Items 2a and 2b should be to the nearest tenth of a foot, or alternatively, unless prohibited by state or local ordinance, the reference level elevation may be "rounded down" to the nearest whole foot ("rounding up" is prohibited).

Item 2(a). For structures located in FIRM Zones A1-A30, AE, AH, and A (with BFE's), record the elevation (to the nearest tenth of a foot) of the top of the floor identified as the reference level in the applicable diagram.

Item 2(b). For structures located in FIRM Zones V1-V30, VE, and V (with BFE's), record the elevation (to the nearest tenth of a foot) of the bottom of the lowest horizontal structural member of the floor identified as the reference level in the applicable diagram.

Item 2(c). For structures located in FIRM Zone A (without BFE's), record the height (to the nearest tenth of a foot) of the top of the floor indicated as the reference level (from the applicable diagram) above or below the highest adjacent grade immediately next to the building.

Item 2(d). For structures located in FIRM Zone AO, the FIRM will show the base flood depth. For locations in FIRM Zone AO record the height (to the nearest tenth of a foot) of the top of the floor identified as the reference level (from the applicable diagram) above or below the highest adjacent grade immediately next to the building. For post-FIRM buildings, the community's floodplain management ordinance requires that this value equal or exceed the base flood depth provided on the FIRM. For those few communities where this base flood depth is not available, the community will need to determine if the lowest floor is elevated in accordance with their floodplain management ordinance.

Item 3. Record the vertical datum system used in identifying the reference level elevations for all buildings. If the datum used in measuring the elevations is different than that used on the FIRM, then convert the elevations in Items 2a-d to the datum used on the FIRM, and show the conversion equation under the Comments section on Page 2.

Item 4. Indicate if the elevation reference mark used appears on the FIRM. Reference marks other than those shown on the FIRM may be used for elevation determinations. In areas experiencing ground subsidence, the most recently adjusted reference mark elevations must be used for reference level elevation determinations.

Item 5. Indicate if the reference level used in making the elevation measurement is based on actual construction or construction drawings. Construction drawings should only be used if the building does not yet have the reference level floor in place, in which case the Elevation Certificate will only be valid for the building during the course of construction. A post-construction Elevation Certificate will be needed once construction is complete.

Item 6. Record the elevation measurement of the lowest grade adjacent to the building (to the nearest tenth of a foot). Adjacent grade is defined as the elevation of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure. This measurement should be to the nearest tenth of a foot if this Certificate is being used to support a request for a LOMA/LOMR.

#### SECTION D Community Information

Completion of this section may be required by the community in order to meet the minimum floodplain management requirements of the NFIP. Otherwise, completion of this section is not required.

Item 1. The community's floodplain management ordinance requires elevation of the building's "lowest floor" above the BFE. For the vast majority of building types, the reference level and the lowest floor will be the same. If the community determines that there is a discrepancy, record the elevation of the lowest floor.

item 2. Enter date. These terms are defined by local ordinance.

#### SECTION E Certification

Complete as indicated. The Elevation Certificate may only be signed by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information when the elevation information for Zones A1-A30, AE, AH, A (with BFE's), V1-V30, VE, and V (with BFE's) is required. Community officials who are authorized by local law or ordinance to provide floodplain management information may also sign this certification. In the case of Zones AO and A (without BFE's), a building official, a property owner, or an owner's representative may sign this certification.

Certification is normally to the information provided in Sections B and C. If the certifier is unable to certify to the selection of reference level diagram 6, 7 or 8 (Section C, Item 1), e.g., because of difficulty in obtaining construction or building use information needed to determine the Distinguishing Feature(s), the certifier must list the Feature(s) excluded from the certification under Comments on Page 2. The diagram number used for the Reference level must still be entered in Section C, Item 1.

#### INSTRUCTIONS

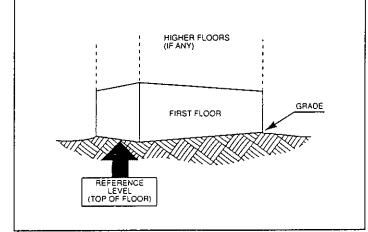
The following 8 diagrams contain descriptions of various types of buildings. Compare the features of your building with those shown in the diagrams and select the diagram most applicable. Indicate the diagram number on the Elevation Certificate (Section C, Item 1) and complete the Certificate. The reference level floor is that level of the building used for underwriting purposes.

NOTE: In all A Zones, the reference level is the top of the lowest floor; in V Zones the reference level is the bottom of the lowest horizontal structural member (see diagram on page 2). Agents should refer to the Flood Insurance Manual for instruction on lowest floor definition.

#### **DIAGRAM NUMBER 1**

ALL SINGLE AND MULTIPLE FLOOR BUILDINGS (OTHER THAN SPLIT LEVEL), INCLUDING MANUFACTURED (MOBILE) HOUSING AND HIGH RISE BUILDINGS, EITHER DETACHED OR ROW TYPF (E.G., TOWNHOUSE, ETC.); WITH OR WITHOUT ATTACHED GARAGE.

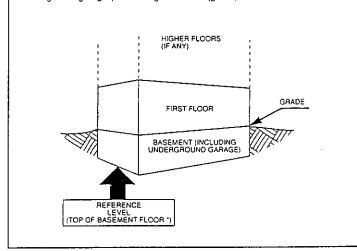
Distinguishing Feature - The first floor is *not* below ground level (grade) on *all* sides\*. This includes "walkout" basements, where at least one side is at or above grade. (Not illustrated)



#### **DIAGRAM NUMBER 2**

ALL SINGLE AND MULTIPLE FLOOR BUILDINGS (OTHER THAN SPLIT LEVEL), INCLUDING MANUFACTURED (MOBILE) HOUSING AND HIGH RISE BUILDINGS, EITHER DETACHED OR ROW TYPE (E.G., TOWNHOUSES, ETC.); WITH OR WITHOUT ATTACHED GARAGE.

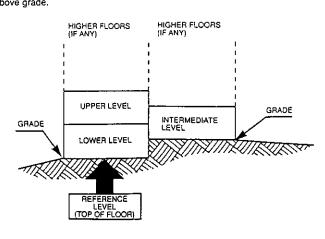
Distinguishing Feature - The first floor or basement (including an underground garage\*) is below ground level (grade) on all sides\*.



#### DIAGRAM NUMBER 3

ALL SPLIT LEVEL BUILDINGS, EITHER DETACHED OR ROW TYPE (E.G., TOWNHOUSES, ETC.); WITH OR WITHOUT ATTACHED GARAGE.

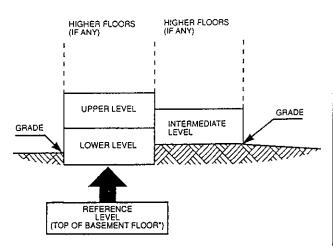
Distinguishing Feature - The lower level is *not* below ground level (grade) on *all* sides\*. This includes "walkout" basements, where at least one side is at or above grade.



#### **DIAGRAM NUMBER 4**

ALL SPLIT LEVEL BUILDINGS, EITHER DETACHED OR ROW TYPE (E.G., TOWNHOUSES, ETC.); WITH OR WITHOUT ATTACHED GARAGE.

Distinguishing Feature - The lower level (or intermediate level) is below ground level (grade) on all sides\*.



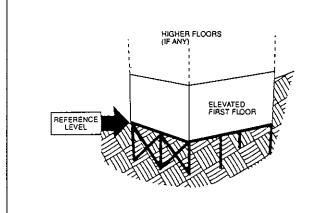
<sup>\*</sup> Under the National Flood Insurance Program's risk classification and insurance coverage, a floor that is below ground level (grade) on all sides is considered a basement even though the floor is used for living purposes, or as an office, garage, workshop, etc.

Note: In all A Zones, the reference level is the top of the lowest floor; in V Zones the reference level is the bottom of the lowest horizontal structural member (see diagram on page 2). Agents should refer to the Flood Insurance Manual for instruction on lowest floor definition.

#### **DIAGRAM NUMBER 5**

ALL BUILDINGS, INCLUDING MANUFACTURED (MOBILE) HOMES ELEVATED ON PIERS, POSTS, COLUMNS, SHEAR WALLS, WITH OR WITHOUT PARKING AREA BELOW ELEVATED FLOOR.

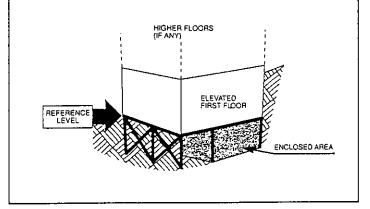
Distinguishing Feature - For all zones, the area below the elevated floor is open, with no obstruction to the flow of flood waters (open wood lattice work or readily removable insect screening is permissible).



#### DIAGRAM NUMBER 6

ALL BUILDINGS, INCLUDING MANUFACTURED (MOBILE) HOMES ELEVATED ON PIERS, POSTS, COLUMNS, SHEAR WALLS, WITH OR WITHOUT PARKING AREA BELOW ELEVATED FLOOR.

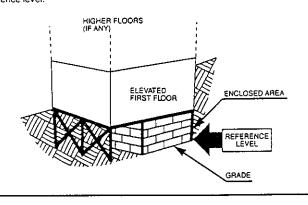
Distinguishing Feature - For V Zones only, the area below the elevated floor is enclosed, either partialty or fully, by solid breakaway walls." When enclosed area is greater than 300 square feet or contains equipment servicing the building, use Diagram Number 7; this will result in a higher insurance rate. The enclosed area can be used for parking, building access or limited storage.



#### DIAGRAM NUMBER 7

ALL BUILDINGS, INCLUDING MANUFACTURED (MOBILE) HOMES ELEVATED ON PIERS, POSTS, COLUMNS, SHEAR WALLS, SOLID NON-BREAKAWAY WALLS, WITH OR WITHOUT PARKING AREA BELOW ELEVATED FLOOR.

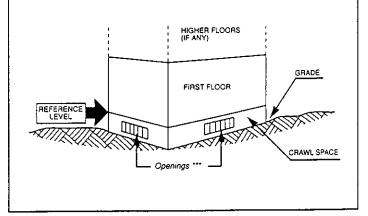
Distinguishing Feature - For all zones, the area below the elevated floor is enclosed, either partially or fully, by solid <u>non</u>-breakaway walls, <u>or</u> contains equipment servicing the building. For V Zones only, the area is enclosed, either partially or fully, by solid breakaway walls." having an enclosed area greater than 300 square feet. For A Zones only, with an area enclosed by solid walls having proper openings, "" and used only for parking, building access, or limited storage, use Diagram Number 8 to determine the reference level.



#### DIAGRAM NUMBER 8

ALL BUILDINGS CONSTRUCTED ABOVE AN UNFINISHED SPACE, INCLUDING CRAWL SPACE.

Distinguishing Feature - For A Zones only, the area below the first floor is enclosed by solid or partial perimeter walls, is unfinished, and contains no equipment servicing the structure. The area can be used for parking, building access, or limited storage.



- Under the National Flood Insurance Program's risk classification and insurance coverage, a floor that is below ground level (grade) on all sides is considered a basement even though the floor is used for living purposes, or as an office, garage, workshop, etc.
- Solid breakaway walls are walls that are not an integral part of the structural support of a building and are intended through their design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation. An area so enclosed is not secure against forceable entry.
- \*\*\* If the area below the lowest floor is fully enclosed, then a minimum of two openings are required with a total net area of at least one square inch for every square foot of area enclosed with the bottom of the openings no more than one foot above grade. Alternatively, certification may be provided by a registered professional engineer or architect that the design will allow equalization of hydrostatic flood forces on exterior walls. If neither of these criteria are met, then the reference level is the lowest grade adjacent to the structure.