

# Ensuring Complete and Correct Elevation Certificates



**NATIONAL  
FLOOD  
INSURANCE  
PROGRAM**

**ELEVATION CERTIFICATE**

**SECTION A - PROPERTY INFORMATION**

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

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

**SECTION D - ADDITIONAL INFORMATION OR ANNOTATED CORRECTIONS**

PLACE SEAL HERE

Sponsored by:  
Southwestern Pennsylvania Commission (SPC)  
Water Resource Center  
May 2018



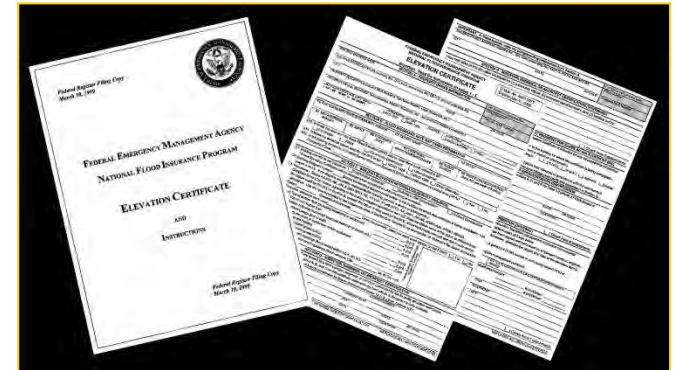
# Today's Speaker



- Tony Subbio, CFM
  - Emergency management and community resilience planner
  - Specializes in hazard mitigation and CRS Program services

# Today's Session

- Elevation Certificate (EC) Basics
- The Elevation Certificate
- Common Elevation Certificate Errors
- Correcting Elevation Certificates
- Helpful Hints
- The Elevation Certificate Checklist
- Review an Elevation Certificate

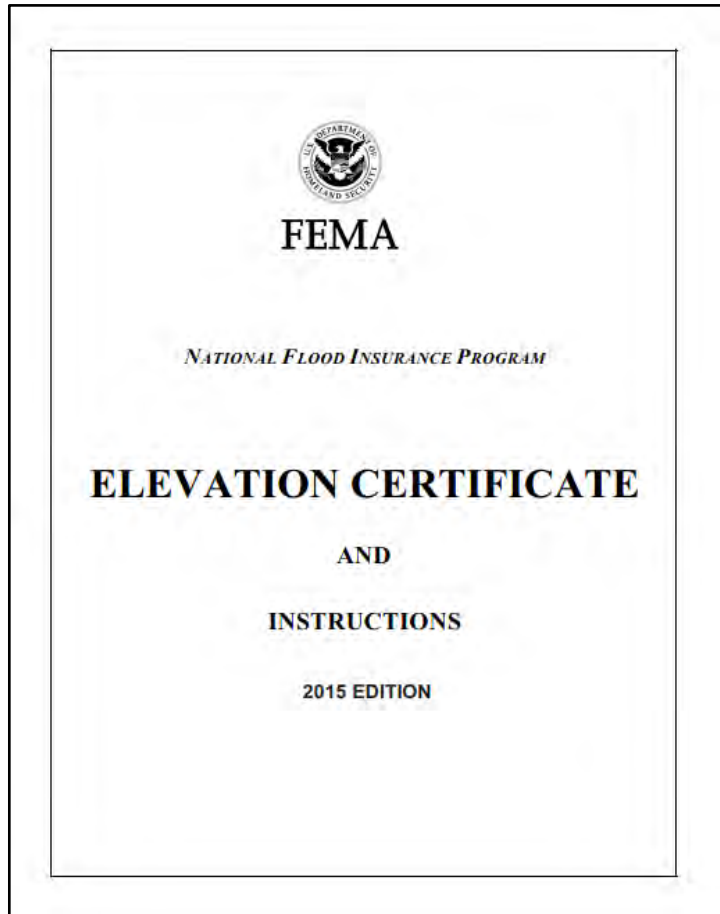


# Elevation Certificate Basics

- Purpose of the EC
  - Required to rate structures
  - Determine compliance with floodplain management regulations
  - Support Letters of map correction (LOMA/LOMR-F)
  - Prerequisite for the CRS
    - All new construction/substantial improvements must have a completed EC.
    - The ECs must be complete and “error-free”



# The Elevation Certificate (EC)



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

OMB No. 1560-0008  
Expiration Date: November 30, 2018

## ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

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

SECTION A - PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owner's Name		Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.		Company NAIC Number:
City	State	ZIP Code
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) _____		
A5. Latitude/Longitude: Lat. _____ Long. _____ Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983		
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.		
A7. Building Diagram Number _____		
A8. For a building with a crawlspace or enclosure(s):		
a) Square footage of crawlspace or enclosure(s) _____ sq ft		
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade _____		
c) Total net area of flood openings in A8.b _____ sq in		
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No		
A9. For a building with an attached garage:		
a) Square footage of attached garage _____ sq ft		
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____		
c) Total net area of flood openings in A9.b _____ sq in		
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No		
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION		
B1. NFIP Community Name & Community Number		B2. County Name
		B3. State
B4. Map/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 Base Flood Depth)
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____		
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____		
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA		

FEMA Form 086-0-33 (7/15) Replaces all previous editions. Form Page 1 of 5



# The Current EC

- NFIP: EC not required
- CRS Program:
  - Permits issued after **7/2015** must use this form.
  - ECs must be **100%** correct for CRS. (They will be audited.)
  - ECs must be based on *“finished”* construction
- **Note-It is within the community’s authority to not accept an incomplete or inaccurate EC.**

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

CMS No. 1603-0008  
Expiration Date: November 30, 2018

## ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

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

SECTION A – PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owners Name		Policy Number:
A2. 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
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)		
A5. Latitude/Longitude: Lat. _____ Long. _____ Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983		
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.		
A7. Building Diagram Number _____		
A8. For a building with a crawlspace or enclosure(s):		
a) Square footage of crawlspace or enclosure(s) _____ sq ft		
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade _____		
c) Total net area of flood openings in A8.b _____ sq ft		
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No		
A9. For a building with an attached garage:		
a) Square footage of attached garage _____ sq ft		
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____		
c) Total net area of flood openings in A9.b _____ sq ft		
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No		
SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION		
B1. NFIP Community Name & Community Number		B3. State
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date
B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AD, use Base Flood Depth)
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in item B9: <input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____		
B11. Indicate elevation datum used for BFE in item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____		
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA		

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# Section A: Property Information

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

OMB No. 1550-0008  
Expiration Date: November 30, 2018

## ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

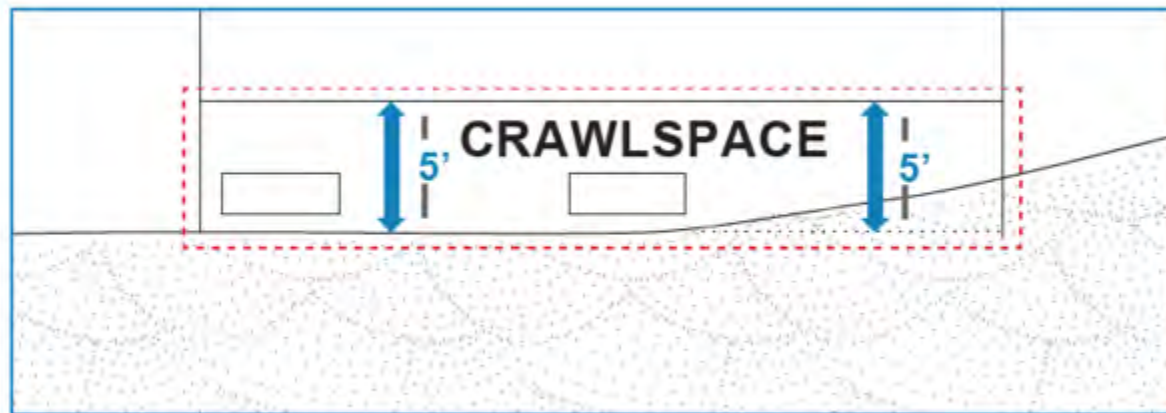
Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A – PROPERTY INFORMATION	FOR INSURANCE COMPANY USE
A1. Building Owner's Name	Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.	Company NAIC Number:
City	ZIP Code
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)	
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)	
A5. Latitude/Longitude: Lat. _____ Long. _____ Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983	
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.	
A7. Building Diagram Number	
A8. For a building with a crawlspace or enclosure(s):	
a) Square footage of crawlspace or enclosure(s) _____ sq ft	
b) Number of permanent food openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade _____	
c) Total net area of food openings in A8.b _____ sq in	
d) Engineered food openings? <input type="checkbox"/> Yes <input type="checkbox"/> No	
A9. For a building with an attached garage:	
a) Square footage of attached garage _____ sq ft	
b) Number of permanent food openings in the attached garage within 1.0 foot above adjacent grade _____	
c) Total net area of food openings in A9.b _____ sq in	
d) Engineered food openings? <input type="checkbox"/> Yes <input type="checkbox"/> No	

# Section A - EC Vocabulary

## *Crawlspace*

*A crawlspace is an under-floor space that has its interior floor area (finished or not) no more than 5 feet below the top of the next-higher floor. Crawlspaces generally have solid foundation walls.*

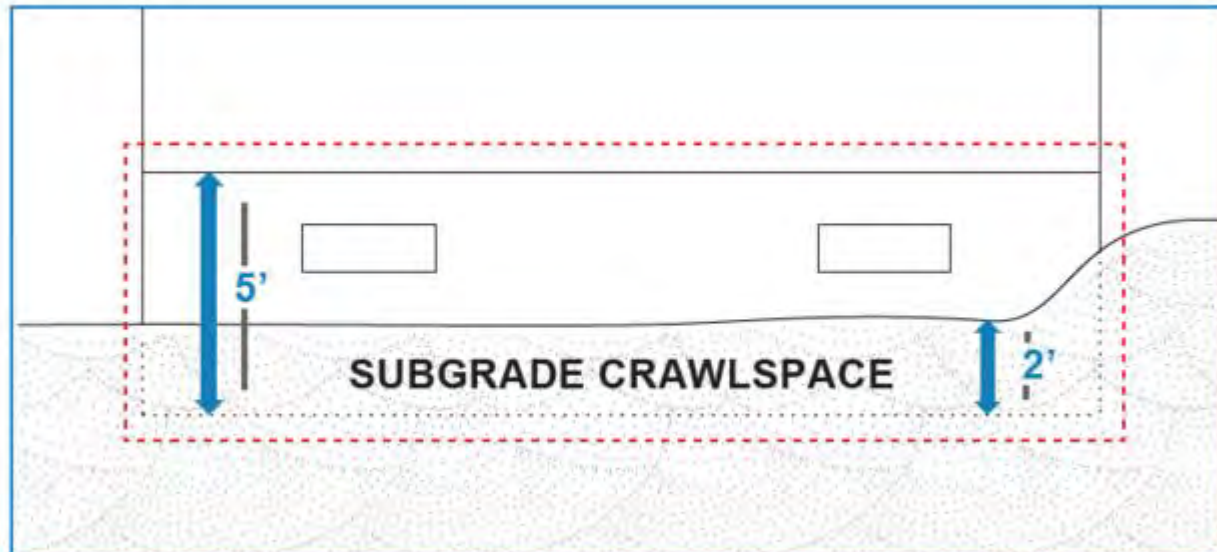




# Section A - EC Vocabulary

## *Subgrade Crawlspace*

*A subgrade crawlspace has its interior floor no more than 5 feet below the top of the next higher floor and no more than 2 feet below the lowest adjacent grade. Basically, it is a crawlspace that has a portion located 2 feet or less below ground.*



# Section A - EC Vocabulary

## ***Enclosure***

*That portion of an elevated building below the lowest elevated floor that is either partially or fully shut in by rigid walls. below the Base Flood Elevation (BFE) may only be used for building access, vehicle parking, and storage.*

# Section A - EC Vocabulary

## *Flood Openings*

*Proper flood openings allow floodwaters to pass into and out of an enclosure, helping to minimize risk when it comes to rating the elevated building for flood insurance.*

- Requirements

- Designs certified by a registered professional engineer or architect

– OR –

- 2+ openings on 2+ walls

- Not higher than 1 foot above grade

- Net area not less than 1 in<sup>2</sup> for every 1 ft<sup>2</sup> of enclosed area

- Operate automatically with no human activation needed

# Section A - EC Vocabulary

- See [https://www.fema.gov/media-library-data/20130726-1502-20490-9949/fema tb 1 1 .pdf](https://www.fema.gov/media-library-data/20130726-1502-20490-9949/fema_tb_1_1.pdf)



## Openings in Foundation Walls and Walls of Enclosures

Below Elevated Buildings in Special Flood Hazard Areas in accordance with the National Flood Insurance Program

Technical Bulletin 1 / August 2008



Where are the vents???



## Section A-8: Crawlspace openings

- The height of flood openings can be determined from the interior grade or floor.

## A-9: Attached Garage

- A basement garage is not considered an attached garage.
- It is a lateral attachment, not including attachment by a breezeway.
- If there is no attached garage, enter “N/A” in all three spaces. If there is an attached garage and there are no openings, the correct entry is “zero,” even if the garage is above the BFE.



# Section B: FIRM Information

For CRS Purposes, the following sections are mandatory fields:

**B1:** NFIP community name/community number.

**B4:** Map AND panel number.

**B5:** Panel number suffix.

**B7:** FIRM panel effective/revised date.

**B8:** Flood zone(s) in which the building is located.

**B9:** Base flood elevation(s).

**B10:** The source of the base flood elevation data

**B11:** The elevation datum

**B12:** Whether the building is located in a Coastal Barrier Resources System

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number <b>Green Tree, Borough of (420040)</b>		B2. County Name <b>Allegheny</b>		B3. State <b>PA</b>	
B4. Map/Panel Number <b>42003C 0337</b>	B5. Suffix <b>H</b>	B6. FIRM Index Date <b>02/17/1989</b>	B7. FIRM Panel Effective/ Revised Date <b>09/26/2014</b>	B8. Flood Zone(s) <b>AE</b>	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) <b>822.0</b>
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in item B9: <input checked="" type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					



# Section C: Building Elevation Information

For CRS purposes:

- ✓ C1
- ✓ All items under C2 are required to have an entry.

*\*\*Note-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.*

ELEVATION CERTIFICATE			OMB No. 1550-0008 Expiration Date: November 30, 2018	
<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>	
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 C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)				
C1. Building elevations are based on: <input type="checkbox"/> Construction Drawings* <input type="checkbox"/> Building Under Construction* <input type="checkbox"/> Finished Construction <small>*A new Elevation Certificate will be required when construction of the building is complete.</small>				
C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters. Benchmark Utilized: _____ Vertical Datum: _____ Indicate elevation datum used for the elevations in items a) through h) below. <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____ Datum used for building elevations must be the same as that used for the BFE.				
Check the measurement used.				
a)	Top of bottom floor (including basement, crawlspace, or enclosure floor)	_____	_____	<input type="checkbox"/> feet <input type="checkbox"/> meters
b)	Top of the next higher floor	_____	_____	<input type="checkbox"/> feet <input type="checkbox"/> meters
c)	Bottom of the lowest horizontal structural member (V Zones only)	_____	_____	<input type="checkbox"/> feet <input type="checkbox"/> meters
d)	Attached garage (top of slab)	_____	_____	<input type="checkbox"/> feet <input type="checkbox"/> meters
e)	Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	_____	_____	<input type="checkbox"/> feet <input type="checkbox"/> meters
f)	Lowest adjacent (finished) grade next to building (LAG)	_____	_____	<input type="checkbox"/> feet <input type="checkbox"/> meters
g)	Highest adjacent (finished) grade next to building (HAG)	_____	_____	<input type="checkbox"/> feet <input type="checkbox"/> meters
h)	Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	_____	_____	<input type="checkbox"/> feet <input type="checkbox"/> meters

## Section C - EC Vocabulary

### ***Finished Construction***

*“Finished Construction” applies 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 finished grading around the building is completed.*

# Section C - EC Vocabulary

## ***Basement***

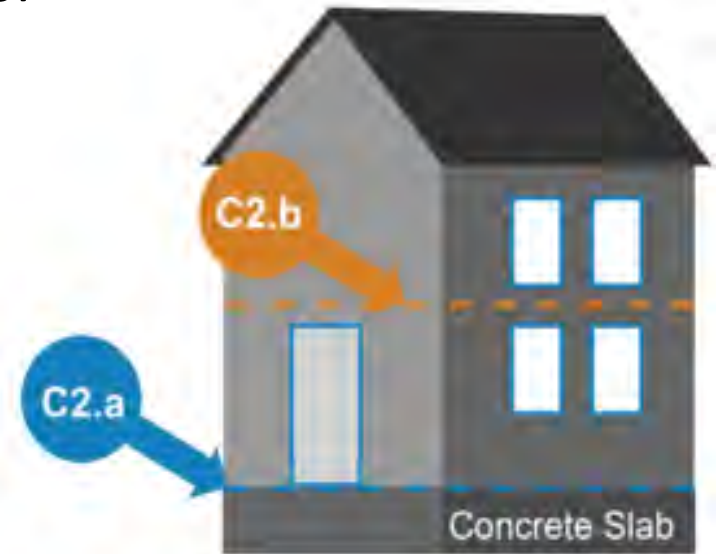
*Any area of the building, including any sunken room or sunken portion of a room, having its floor below ground level (subgrade) on all sides.*



# Section C - EC Vocabulary

## Lowest Floor

*The floor of the lowest enclosed area (including a basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of requirements.*



## Section C – EC Vocabulary

### *Lowest horizontal structural member*

If the building you are rating is in a V zone, you will need the elevation of the bottom of the lowest horizontal structural member or C2.c. Many times, this is the bottom of a support beam that runs beneath an elevated building and braces it.



## Section C – EC Vocabulary

### *Machinery/Equipment*

Utilities and their associated equipment. Includes but is not limited to:

- elevators
- Furnaces
- hot water heaters
- heat pumps
- Electrical service panel
- ***Yes, this includes “duct work!”***



# Section C – EC Vocabulary

## *Grade level*

There are two measurements associated with grade level: the highest adjacent grade (HAG) next to the building (Item C2.g on the EC) and lowest adjacent grade (LAG) (Item C2.f on the EC).



# Building Types

There are three types of buildings represented in the diagrams on the EC.

1. Slab-on-Grade



2. Buildings with basements



3. Buildings with elevated foundations



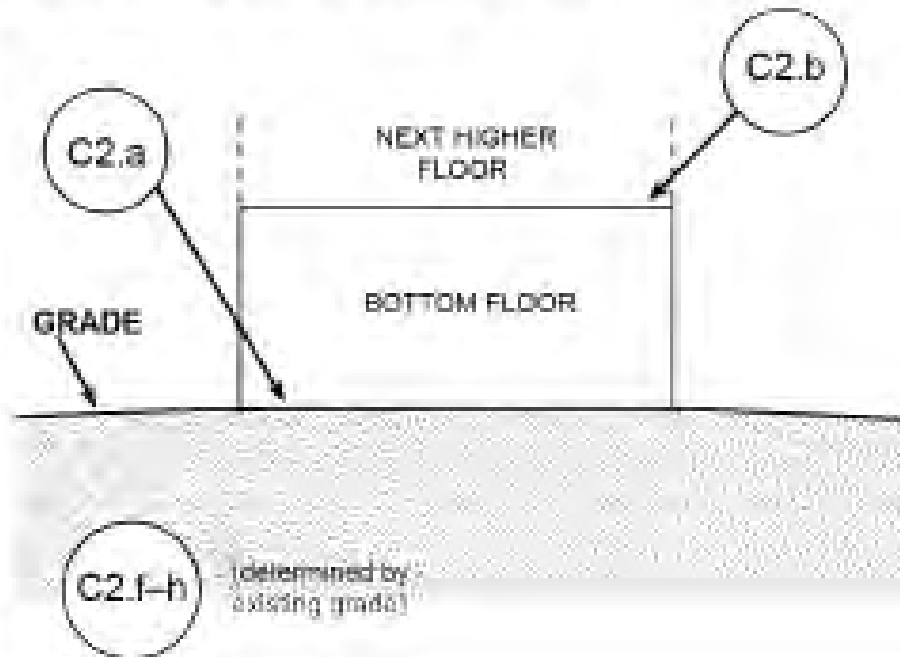


# Diagram #1A

## DIAGRAM 1A

All slab-on-grade single- and multiple-floor buildings (other than split-level) and high-rise buildings, either detached or row type (e.g., townhouses); with or without attached garage.

Distinguishing Feature – The bottom floor is at or above ground level (grade) on at least 1 side.\*



# Diagram # 1A

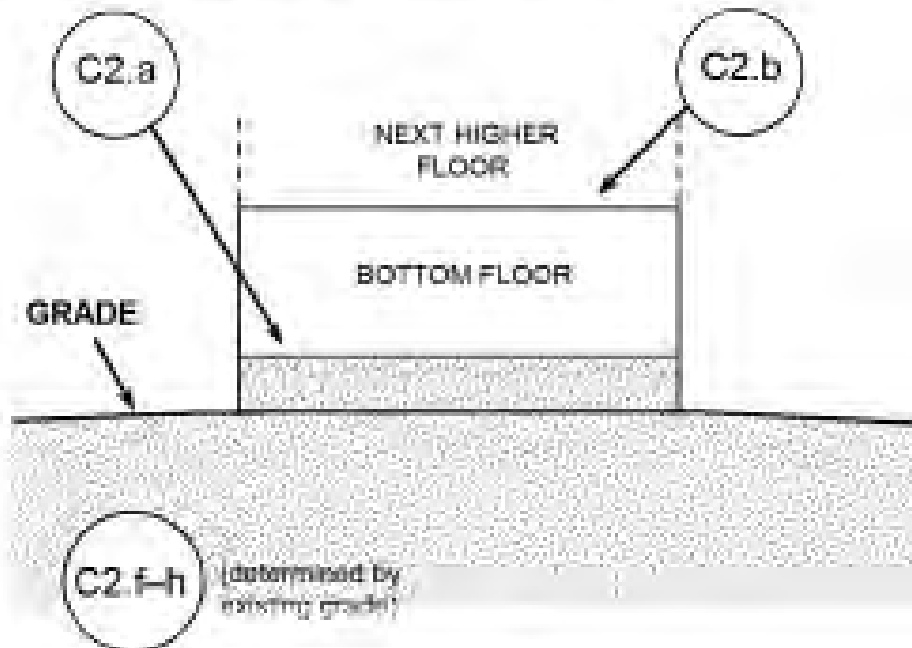


# Diagram #1B

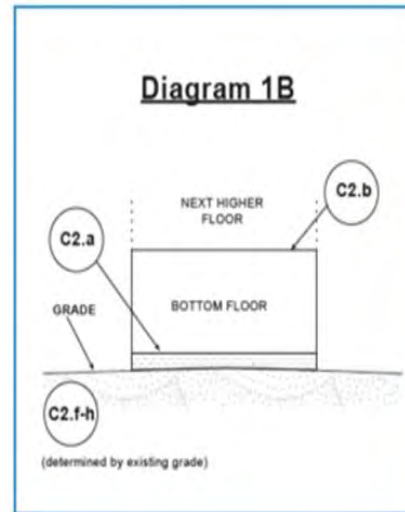
## DIAGRAM 1B

All raised-slab-on-grade or slab-on-stem-wall-with-fill single- and multiple-floor buildings (other than split-level), either detached or row type (e.g., townhouses); with or without attached garage.

Distinguishing Feature – The bottom floor is at or above ground level (grade) on at least 1 side.\*



# Diagram #1B



# Diagram # 1

**A7. Building Diagram Number** 1A

**B9. Base Flood Elevation(s)**  
(Zone AO, use Base Flood Depth)  
**774.0**

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>	
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 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. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: RM-32 Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929  NAVD 1988  Other/Source: \_\_\_\_\_

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

- |  |               |  |                                 |
|--|---------------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)  | <u>775.25</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor  | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)  | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)   | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) | <u>780.5</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)   | <u>774.0</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)  | <u>774.65</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                               | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |

# Let's Take a Break!

# Buildings with Basements

## Diagram #2-4

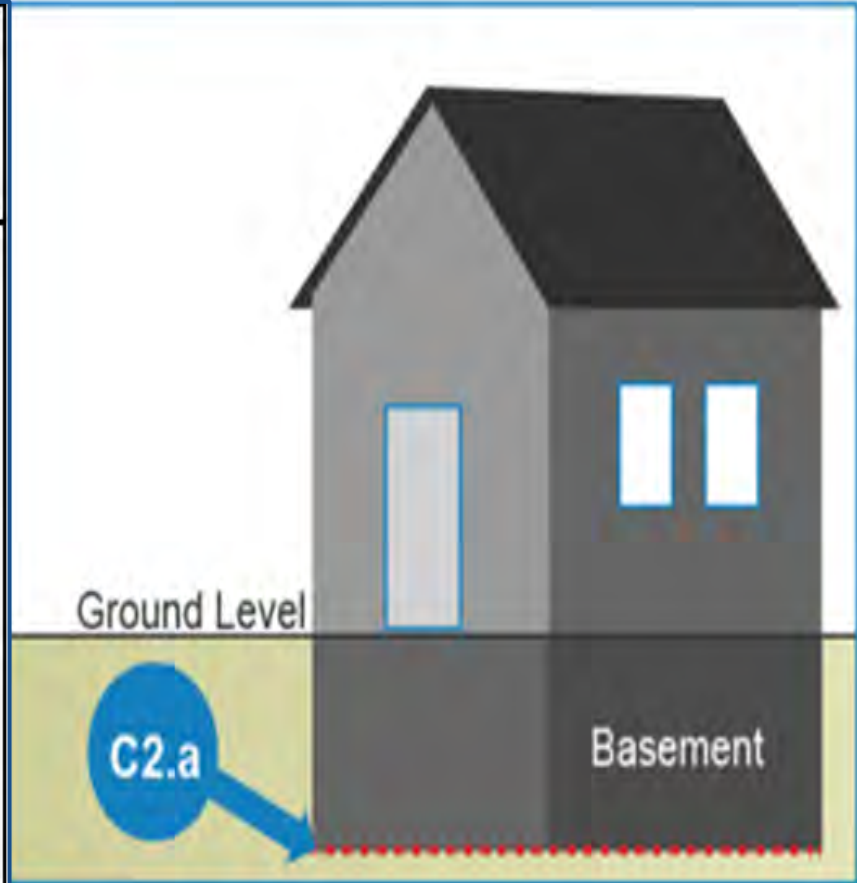
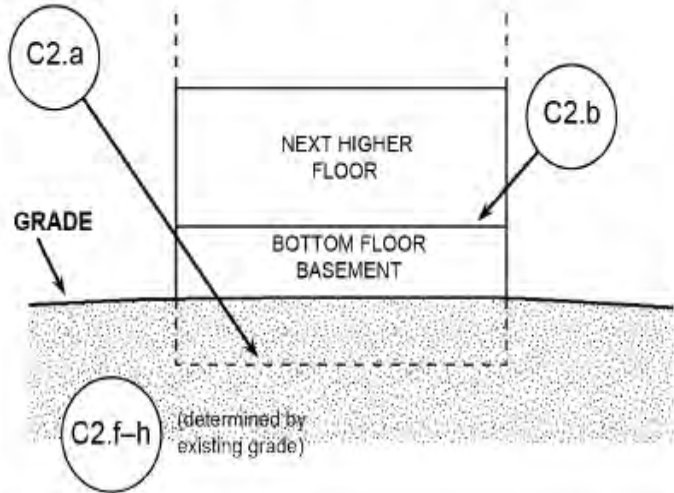


# Diagram #2A

**DIAGRAM 2A**

All single- and multiple-floor buildings with basement (other than split-level) and high-rise buildings with basement, either detached or row type (e.g., townhouses); with or without attached garage.

**Distinguishing Feature** – The bottom floor (basement or underground garage) is below ground level (grade) on all sides.\*



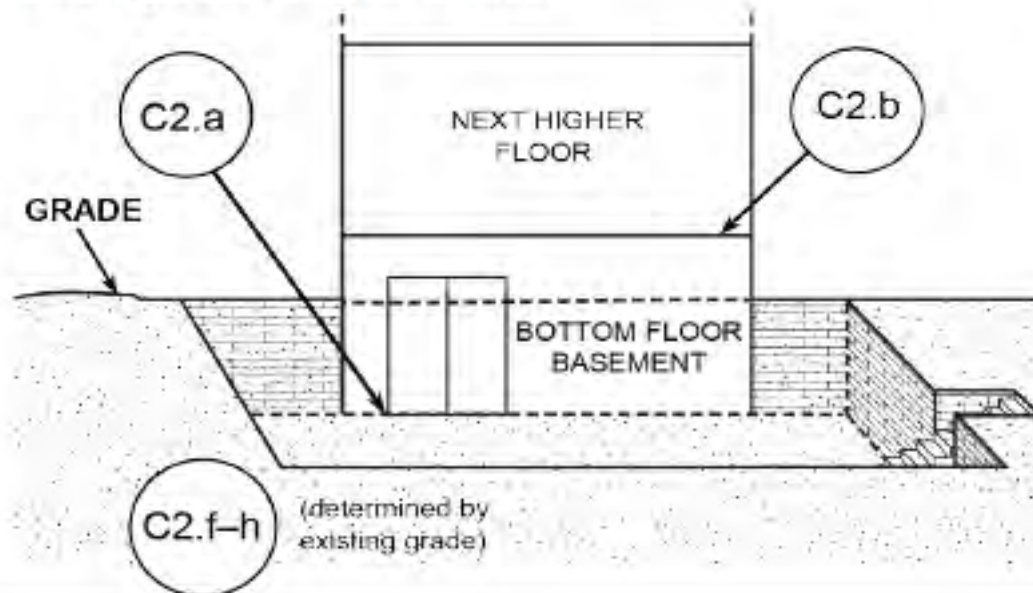


# Diagram #2B

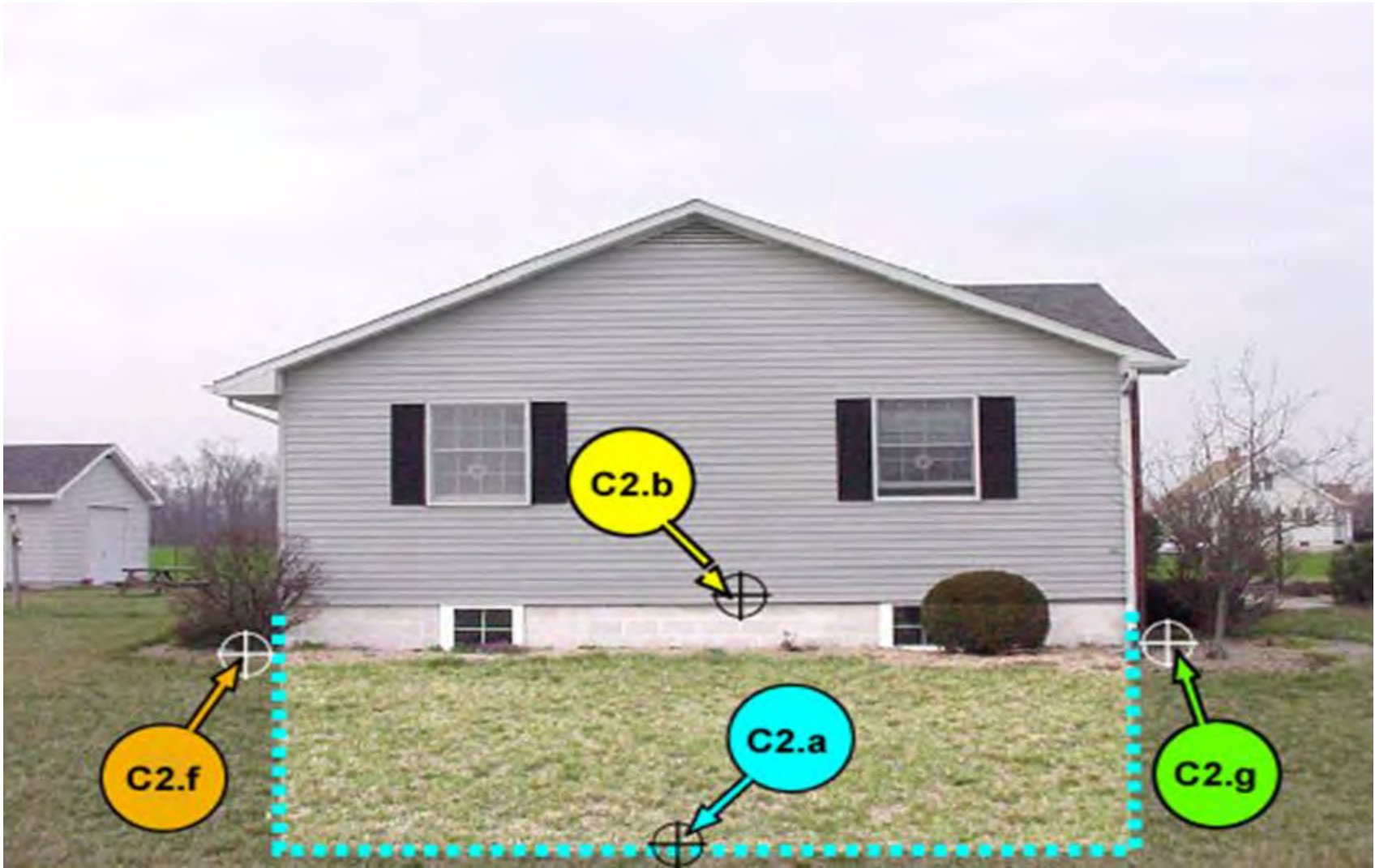
## DIAGRAM 2B

**All single- and multiple-floor buildings with basement (other than split-level) and high-rise buildings with basement, either detached or row type (e.g., townhouses); with or without attached garage.**

**Distinguishing Feature** – The bottom floor (basement or underground garage) is below ground level (grade) on all sides; most of the height of the walls is below ground level on all sides; and the door and area of egress are also below ground level on all sides.\*



# Diagram #2



# Diagram #2

A7. Building Diagram Number 2

B9. Base Flood Elevation(s)  
(Zone AO, use Base  
Flood Depth) **774.00**

## 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. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: RM-32 Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929  NAVD 1988  Other/Source: \_\_\_\_\_

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

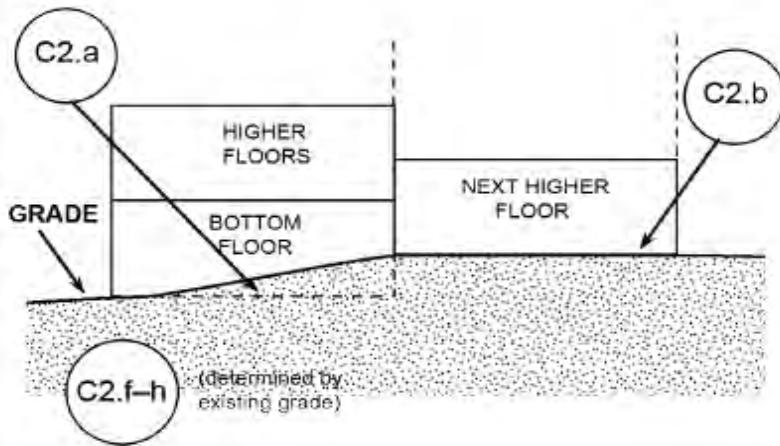
- |   |               |  |                                 |
|---|---------------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)   | <u>768.80</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor   | <u>776.0</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)   | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)  | <u>774.80</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building<br>(Describe type of equipment and location in Comments) | <u>769.50</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)  | <u>774.0</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)   | <u>775.10</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including<br>structural support                               | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |

# Diagram #3

**DIAGRAM 3**

All split-level buildings that are slab-on-grade, either detached or row type (e.g., townhouses); with or without attached garage.

**Distinguishing Feature** – The bottom floor (excluding garage) is at or above ground level (grade) on at least 1 side.\*



# Diagram #3



# Diagram #3

A7. Building Diagram Number 3

B9. Base Flood Elevation(s)  
(Zone AO, use Base  
Flood Depth) **774.0**

## 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. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: RM-32 Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929  NAVD 1988  Other/Source: \_\_\_\_\_

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

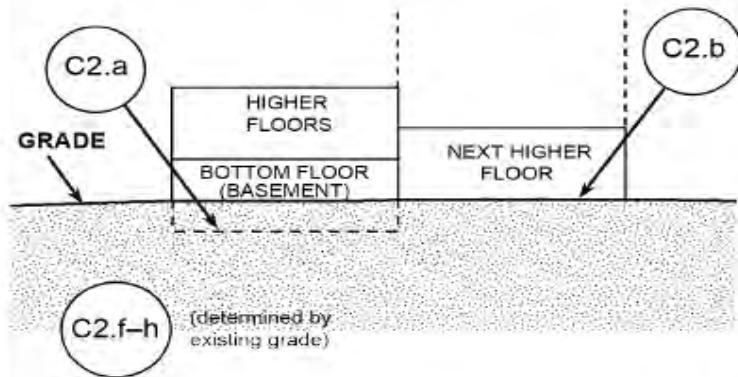
- |   |               |  |                                 |
|---|---------------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)   | <u>773.25</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor   | <u>775.60</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)   | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)  | <u>774.75</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building<br>(Describe type of equipment and location in Comments) | <u>773.8</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)  | <u>772.50</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)   | <u>774.5</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                                  | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |

# Diagram #4

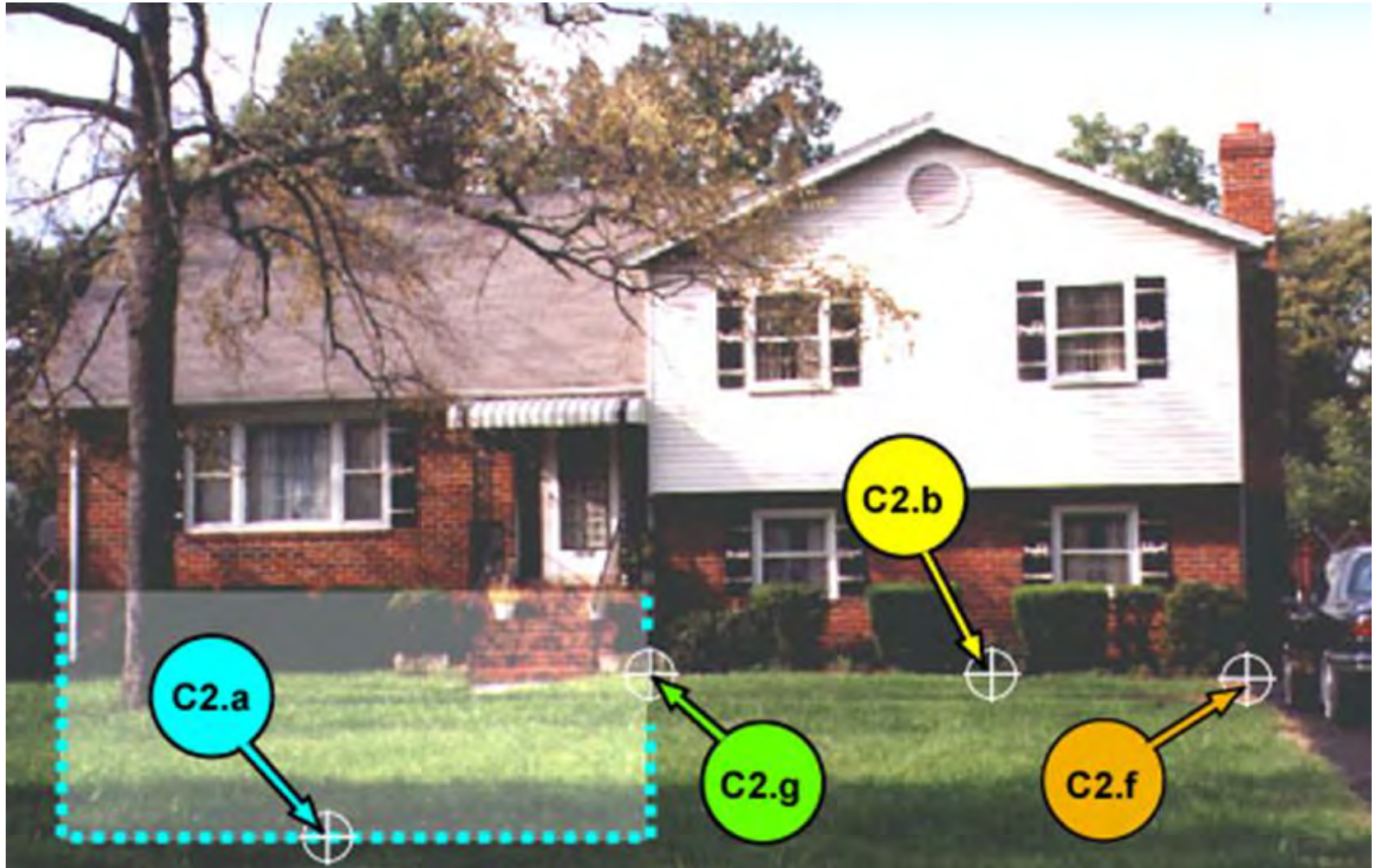
**DIAGRAM 4**

All split-level buildings (other than slab-on-grade), either detached or row type (e.g., townhouses); with or without attached garage.

**Distinguishing Feature** – The bottom floor (basement or underground garage) is below ground level (grade) on all sides.\*



# Diagram #4





# Diagram #4

A7. Building Diagram Number 4

B9. Base Flood Elevation(s)  
(Zone AO, use Base Flood Depth) **774.0**

## 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. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: RM-32 Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929  NAVD 1988  Other/Source: \_\_\_\_\_

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

- |   |               |  |                                 |
|---|---------------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)   | <u>763.9</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor   | <u>772.9</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)   | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)  | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building<br>(Describe type of equipment and location in Comments) | <u>765.00</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)  | <u>772.5</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)   | <u>774.1</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                                  | <u>N/A</u>    | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |

# Elevated Buildings Diagram #5-9



# Building Elevation Vocabulary

## *Elevated Building*

*FEMA defines an elevated building as one that:*

- 1. Has no basement, and*
- 2. Has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns*

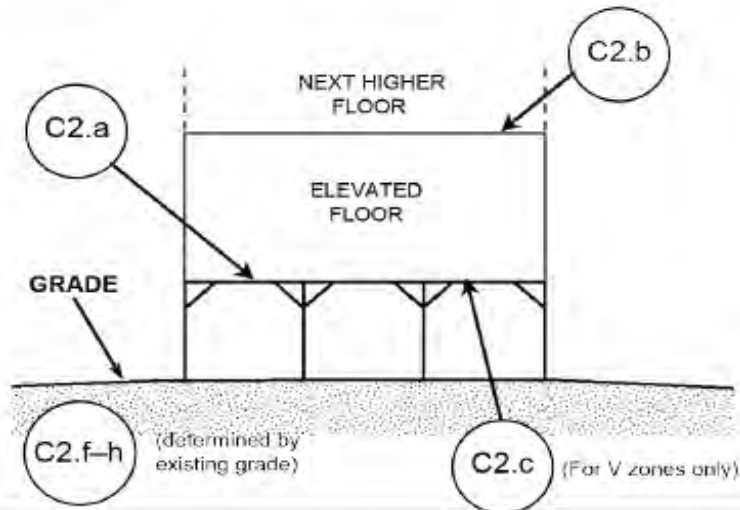


# Diagram #5

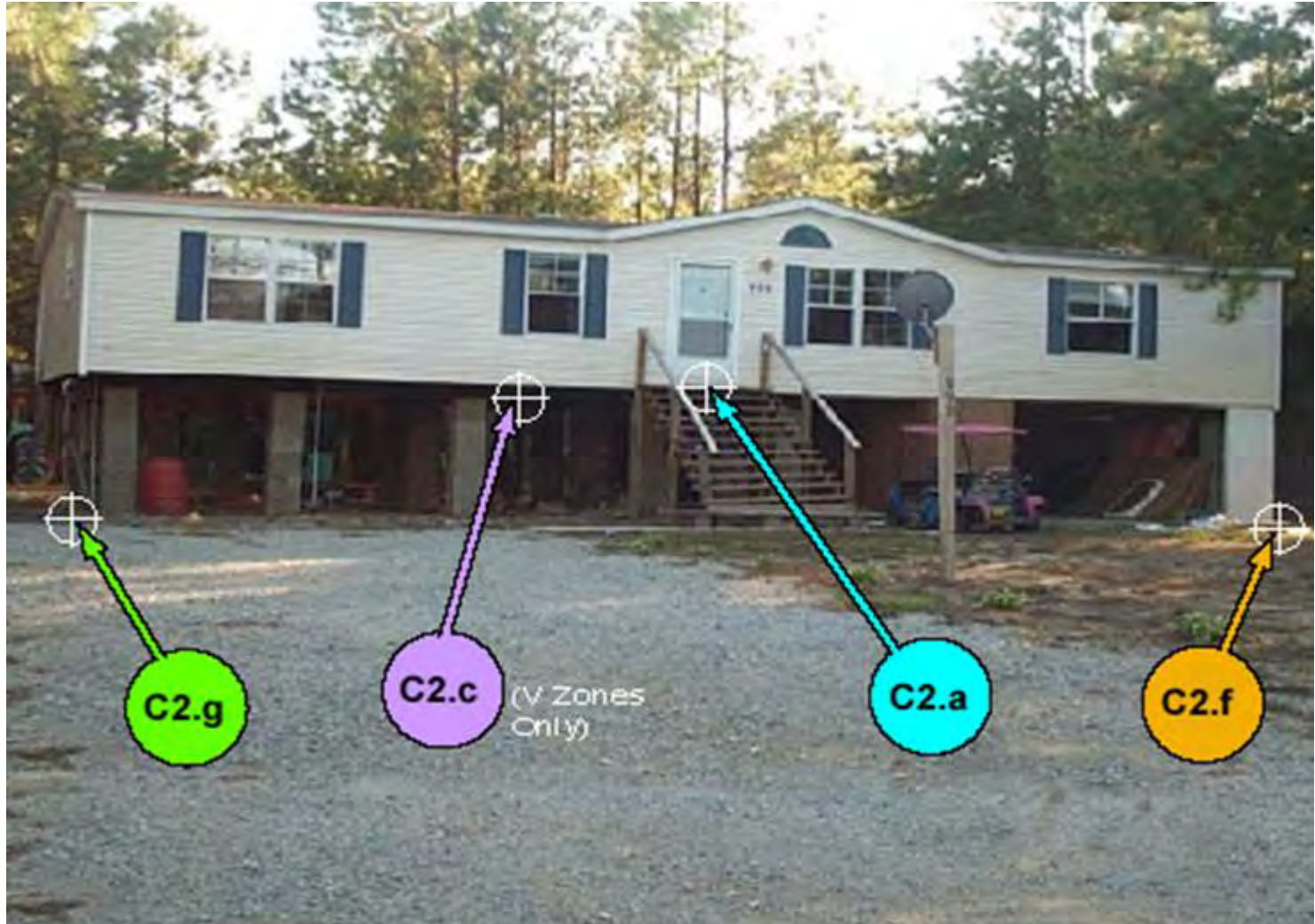
## DIAGRAM 5

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 floodwaters (open lattice work and/or insect screening is permissible).



# Diagram # 5



# Diagram # 5

A7. Building Diagram Number 5

B8. Flood Zone(s)  
**VE**

B9. Base Flood Elevation(s)  
(Zone AO, use Base Flood Depth)  
**48.00**

## 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. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: RM-10 Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929  NAVD 1988  Other/Source: \_\_\_\_\_

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

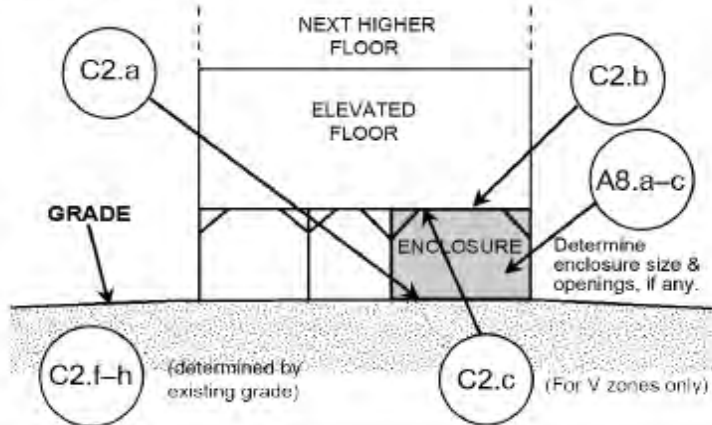
- |   |              |  |                                 |
|---|--------------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)   | <u>49.50</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor   | <u>N/A</u>   | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)   | <u>48.5</u>  | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)  | <u>N/A</u>   | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building<br>(Describe type of equipment and location in Comments) | <u>42.65</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)  | <u>42.45</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)   | <u>42.50</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                                  | <u>42.50</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |

# Diagram # 6

## 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 enclosure size and openings in Section A – Property Information.



# Diagram # 6





# Diagram #6

A7. Building Diagram Number 6

B8. Flood Zone(s)

**VE**

B9. Base Flood Elevation(s)  
(Zone AO, use Base Flood Depth)

**48.00**

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s) 800 sq ft

b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 8

c) Total net area of flood openings in A8.b 640 sq in

d) Engineered flood openings?  Yes  No

## 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. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: RM-12 Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929  NAVD 1988  Other/Source: \_\_\_\_\_

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

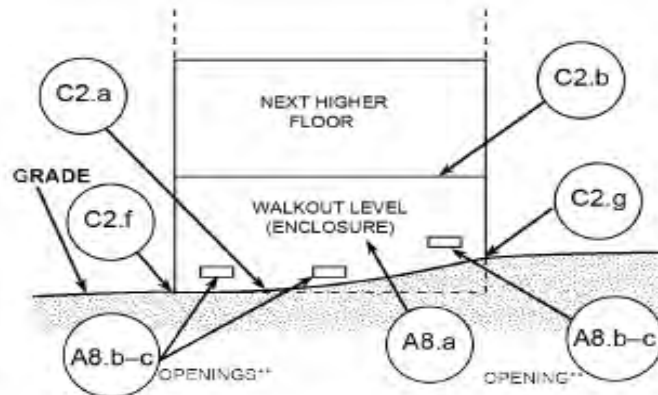
- |   |              |  |                                 |
|---|--------------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)   | <u>37.90</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor   | <u>50.00</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)   | <u>49.20</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)  | <u>N/A</u>   | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building<br>(Describe type of equipment and location in Comments) | <u>50.00</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)  | <u>37.85</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)   | <u>37.85</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                                  | <u>37.85</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |

# Diagram # 7

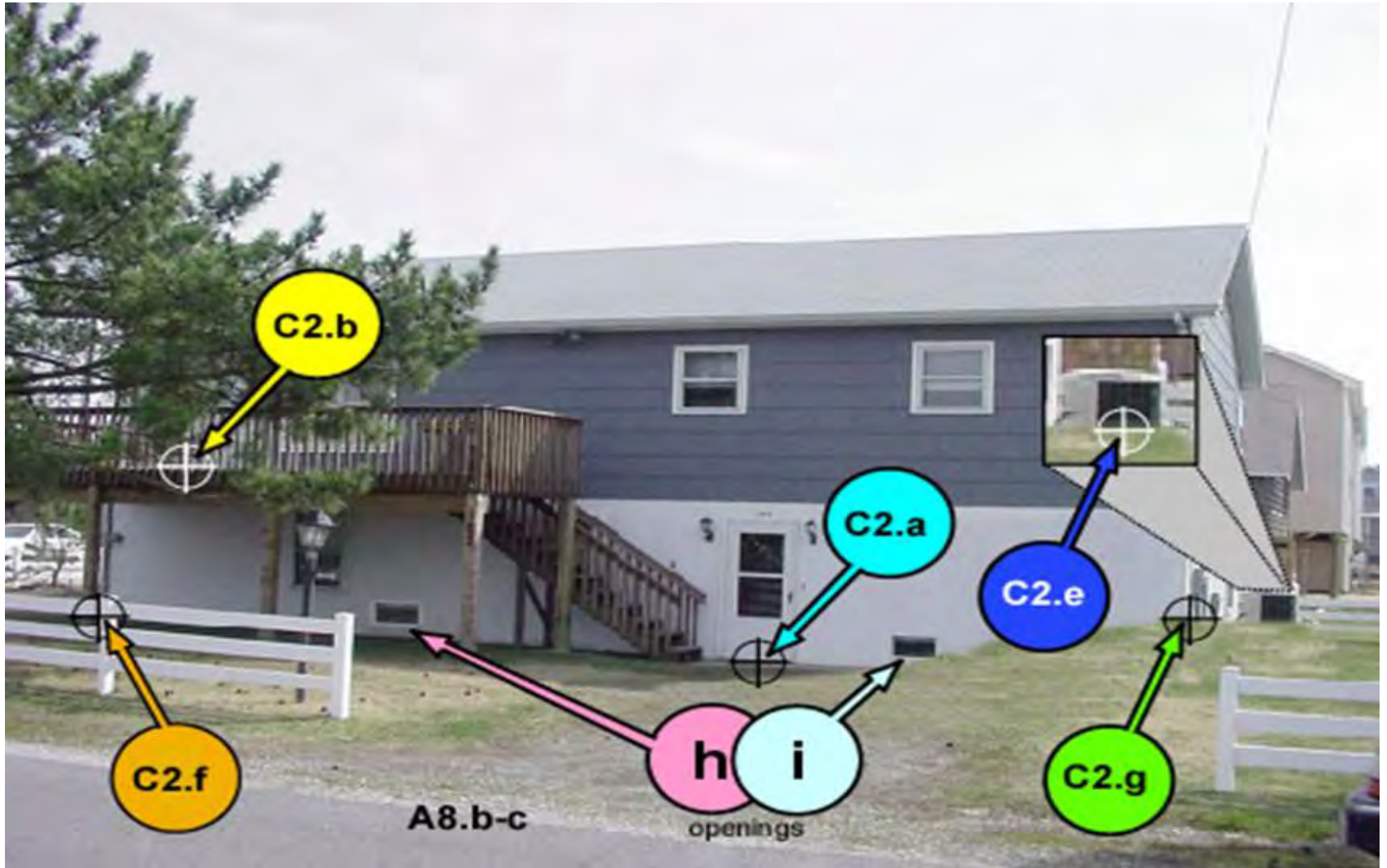
## DIAGRAM 7

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 1 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 enclosure size and openings in Section A – Property Information.



# Diagram # 7



# Diagram #7

A7. Building Diagram Number 7

B8. Flood Zone(s) <b>AE</b>	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) <b>2352.00</b>
--------------------------------	--

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s) 2000 sq ft

b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 18

c) Total net area of flood openings in A8.b 1440 sq in

d) Engineered flood openings?  Yes  No

## 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. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: RM-7 Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929  NAVD 1988  Other/Source: \_\_\_\_\_

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

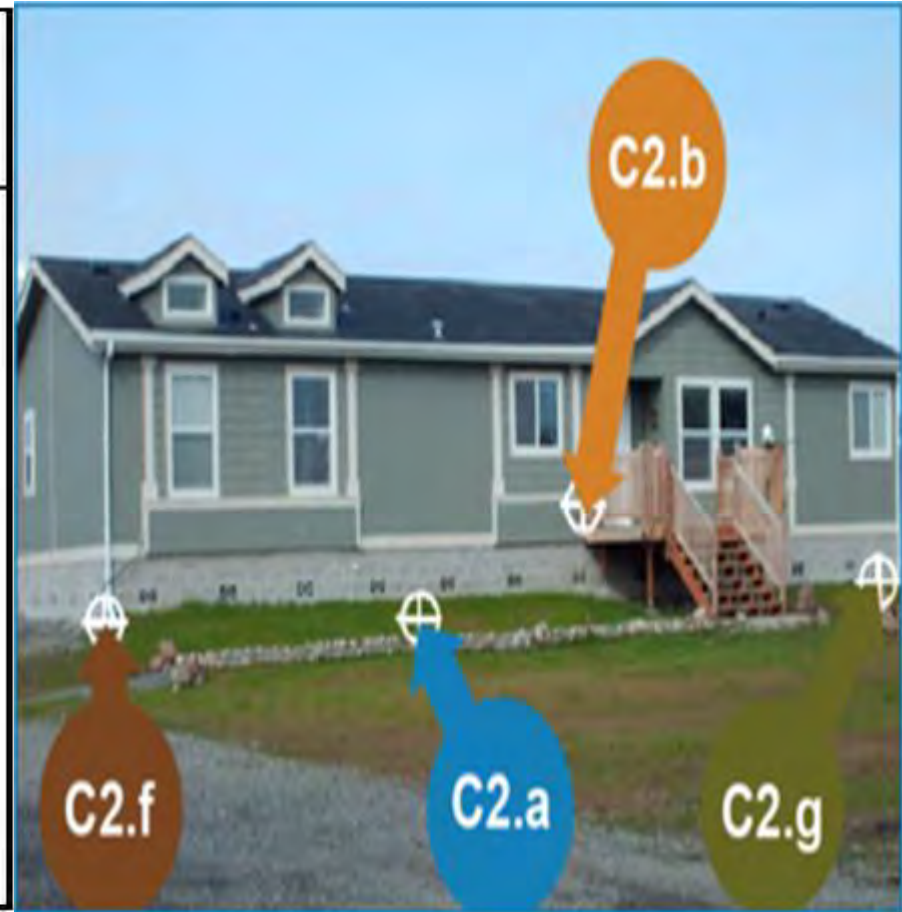
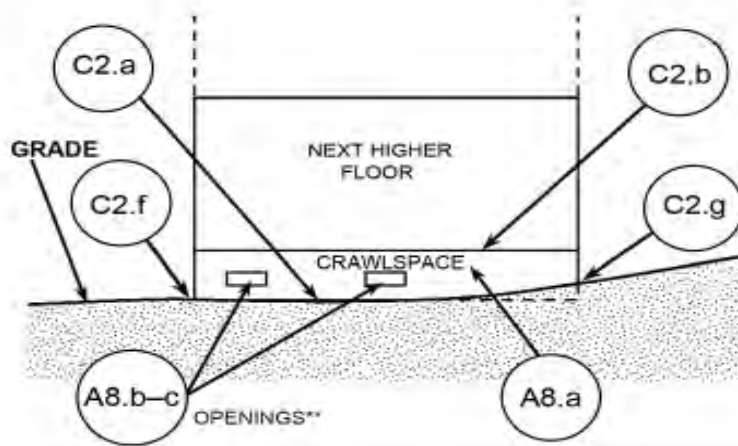
- |   |                |  |                                 |
|---|----------------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)   | <u>2347.60</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor   | <u>2354.00</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)   | <u>N/A</u>     | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)  | <u>N/A</u>     | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building<br>(Describe type of equipment and location in Comments) | <u>2354.00</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)  | <u>2347.40</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)   | <u>2348.10</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                                  | <u>N/A</u>     | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |

# Diagram # 8

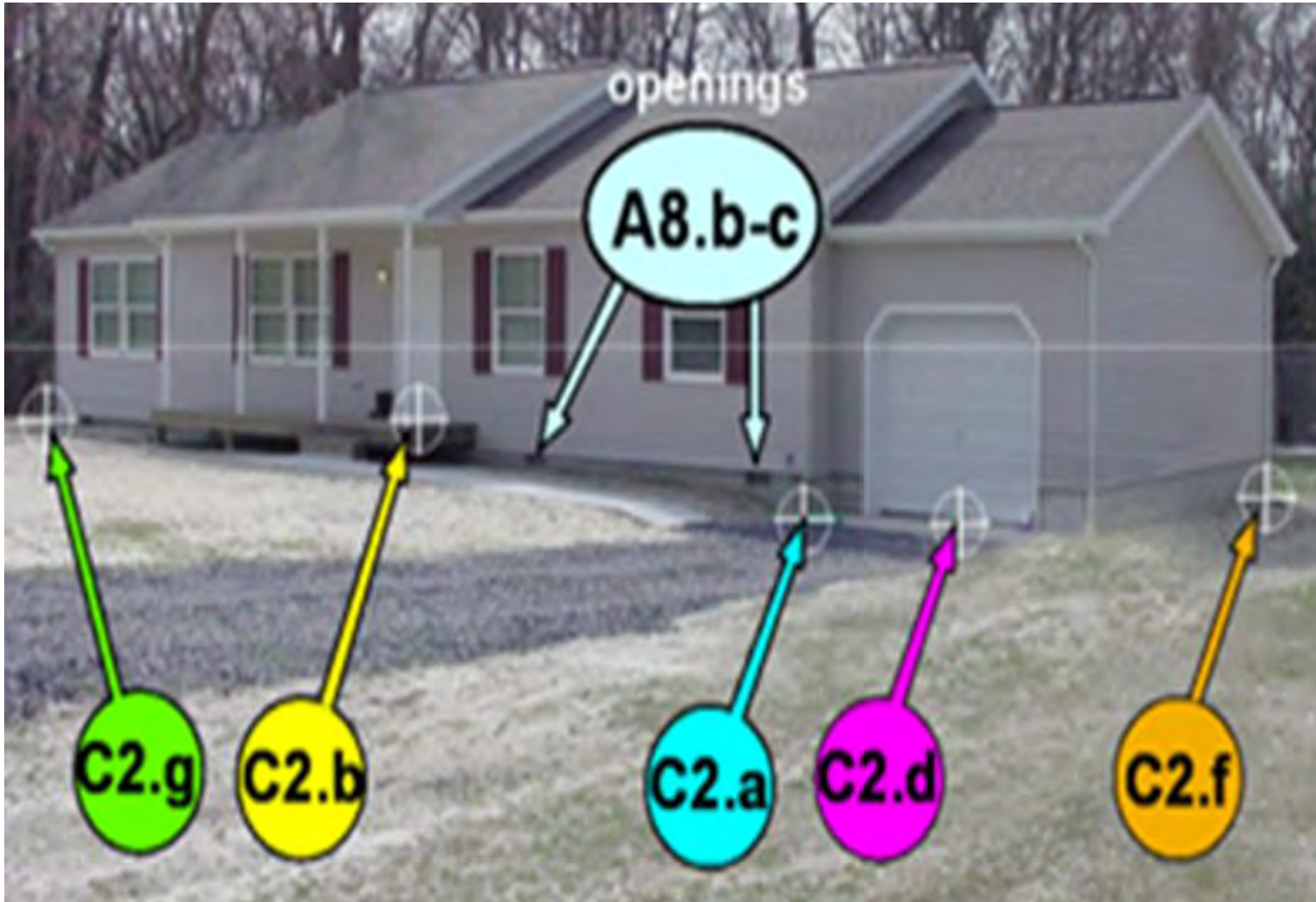
## DIAGRAM 8

All buildings elevated on a crawlspace with the floor of the crawlspace at or above grade on at least 1 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 crawlspace is with or without openings\*\* present in the walls of the crawlspace. Indicate information about crawlspace size and openings in Section A – Property Information.



# Diagram # 8



# Diagram #8

A7. Building Diagram Number <u>8</u>	
B8. Flood Zone(s) <b>AE</b>	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) <b>789</b>

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s) 1250 sq ft

b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 12

c) Total net area of flood openings in A8.b 1440 sq in

d) Engineered flood openings?  Yes  No

## 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. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: RM-14 Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929  NAVD 1988  Other/Source: \_\_\_\_\_

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

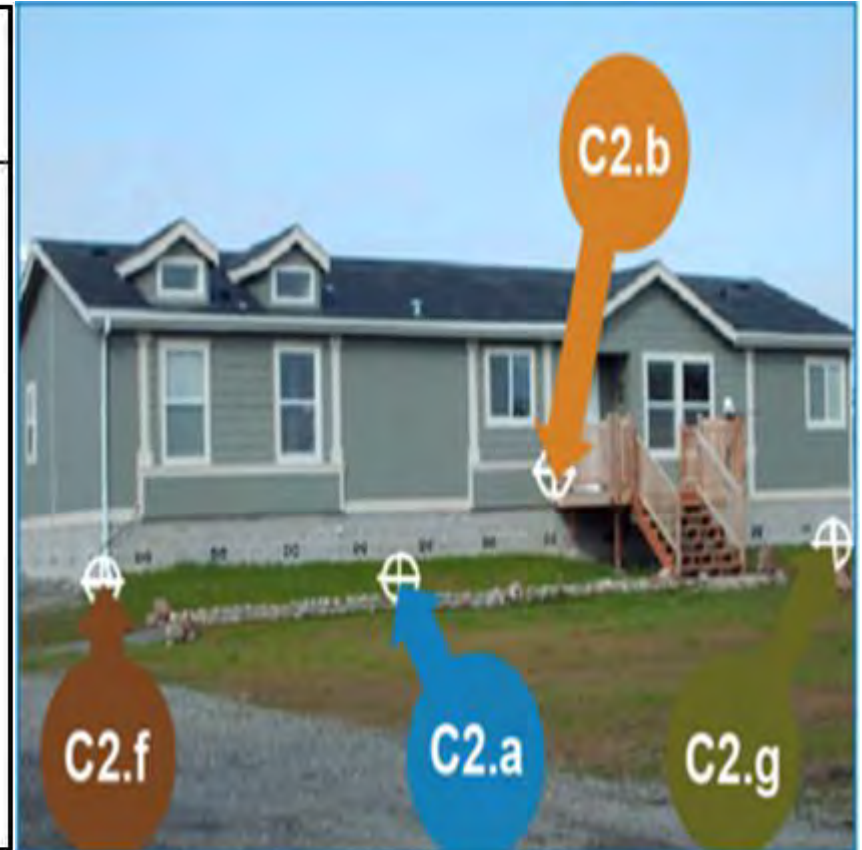
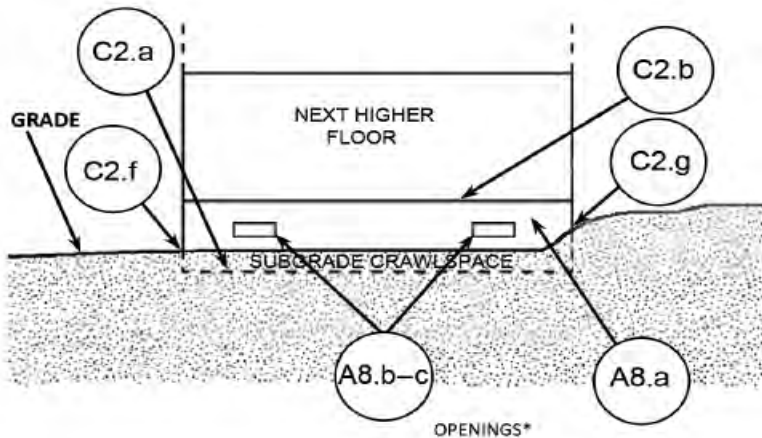
- |   |              |  |                                 |
|---|--------------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)   | <u>788.2</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor   | <u>790.5</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)   | <u>N/A</u>   | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)  | <u>788.2</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building<br>(Describe type of equipment and location in Comments) | <u>790.8</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)  | <u>788.5</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)   | <u>789.0</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                                  | <u>N/A</u>   | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |

# Diagram # 9

## DIAGRAM 9

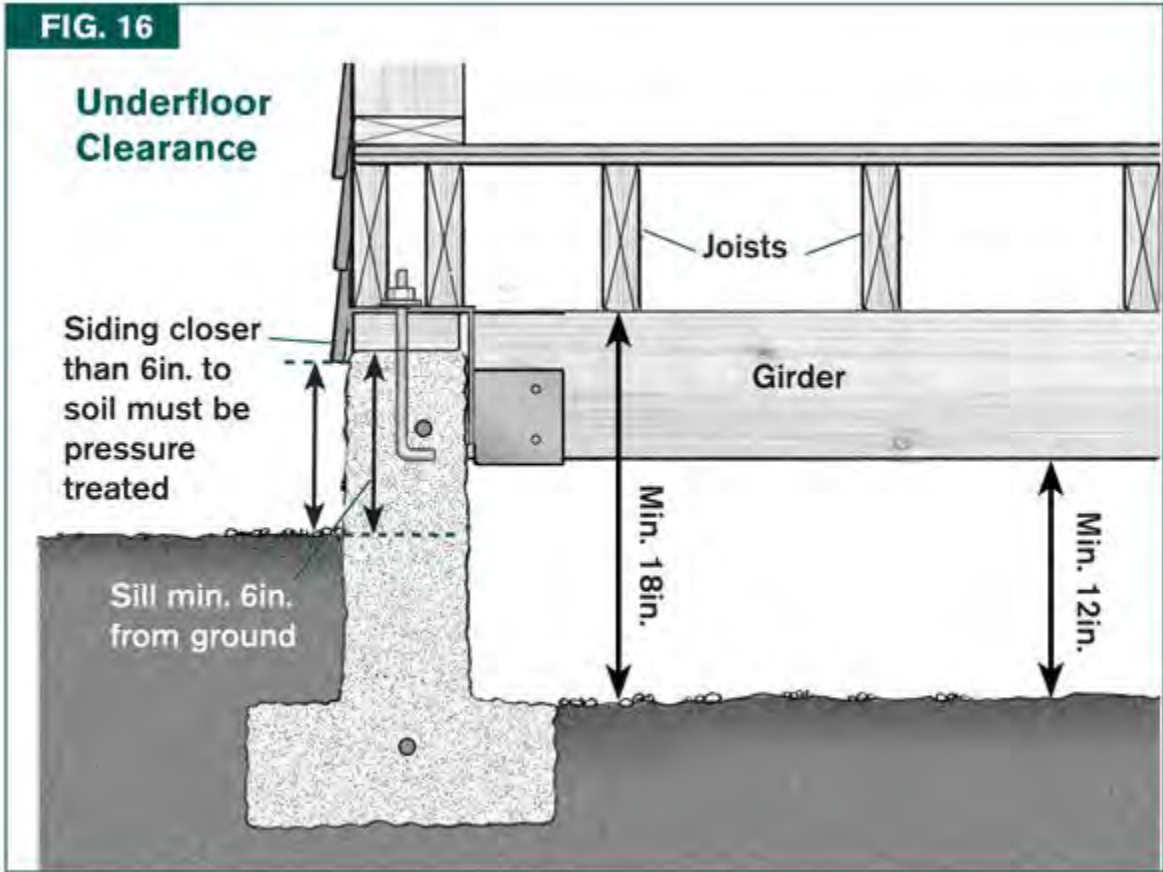
All buildings (other than split-level) elevated on a sub-grade crawlspace, with or without attached garage.

**Distinguishing Feature** – The bottom (crawlspace) floor is below ground level (grade) on all sides.\* (If the distance from the crawlspace floor to the top of the next higher floor is more than 5 feet, or the crawlspace floor is more than 2 feet below the grade [LAG] on all sides, use Diagram 2A or 2B.)





# Diagram # 9



# IMPORTANT NOTE

- If you are going to permit subgrade crawlspaces in the floodplain, you need to make sure that your floodplain management ordinance:
  1. *Defines “crawlspace”*
  2. *Includes the 4 provisions of FEMA’s “Technical Bulletin 11-01: Crawlspace Construction for Buildings Located in Special Flood Hazard Areas.”*
- *If the crawlspace does not meet the TB 11-01 requirements, it is a basement (Diagram 2, not Diagram 9)!*



Technical Bulletin  
**Crawlspace Construction**  
for Buildings Located in Special Flood Hazard Areas  
National Flood Insurance Program Interim Guidance  
FEMATB-11 / November 2001



# Diagram #9

A7. Building Diagram Number <u>9</u>	
B8. Flood Zone(s) <b>AE</b>	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) <b>789</b>

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s) 1250 sq ft

b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 12

c) Total net area of flood openings in A8.b 1440 sq in

d) Engineered flood openings?  Yes  No

## 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. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO.  
 Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: RM-14 Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929  NAVD 1988  Other/Source: \_\_\_\_\_

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

- |   |              |  |                                 |
|---|--------------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor)   | <u>788.2</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor   | <u>793.5</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only)   | <u>N/A</u>   | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |
| d) Attached garage (top of slab)  | <u>788.2</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building<br>(Describe type of equipment and location in Comments) | <u>790.8</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG)  | <u>788.5</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG)   | <u>789.0</u> | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support                                  | <u>N/A</u>   | <input type="checkbox"/> feet            | <input type="checkbox"/> meters |

# Any Questions?



# Section D: Surveyor, Engineer, or Architect Certification

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

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

Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No  Check here if attachments.

Certifier's Name

License Number

Title

Company Name

Address

City

State

ZIP Code

Signature

Date

Telephone

Place  
Seal  
Here

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

Comments (including type of equipment and location, per C2(e), if applicable)

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

<b>SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)</b>	
<p>For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.</p>	
<p><b>E1.</b> Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).</p> <p>a) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ . _____ <input type="checkbox"/> feet <input type="checkbox"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.</p> <p>b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ . _____ <input type="checkbox"/> feet <input type="checkbox"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the LAG.</p>	
<p><b>E2.</b> For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 1–2 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____ . _____ <input type="checkbox"/> feet <input type="checkbox"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.</p>	
<p><b>E3.</b> Attached garage (top of slab) is _____ . _____ <input type="checkbox"/> feet <input type="checkbox"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.</p>	
<p><b>E4.</b> Top of platform of machinery and/or equipment servicing the building is _____ . _____ <input type="checkbox"/> feet <input type="checkbox"/> meters <input type="checkbox"/> above or <input type="checkbox"/> below the HAG.</p>	
<p><b>E5.</b> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown. The local official must certify this information in Section G.</p>	

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

SECTION F – PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION			
The property owner or owner's authorized representative who completes Sections A, B, 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, and E are correct to the best of my knowledge.			
Property Owner or Owner's Authorized Representative's Name			
Address	City	State	ZIP Code
Signature	Date	Telephone	
Comments			
<h2>Certify measurements taken by a property owner or representative</h2>			
<input type="checkbox"/> Check here if attachments.			

# Section G - Community Information

✓ If G1 or G2 is checked, then the first and third lines after G10 (the local official's name and signature) must be completed.

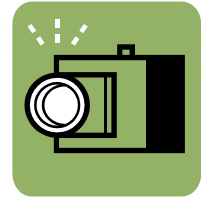
✓ NOTE: If a local official authorized by law to complete an Elevation Certificate fills out ALL the information (including elevation data), then G8, G9, and the signature block must be completed.

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. Check the measurement used in Items G8–G10. In Puerto Rico only, enter meters.		
G1. <input type="checkbox"/> The information in Section C was taken from other documentation 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 and date of the elevation data in the Comments area below.)		
G2. <input type="checkbox"/> 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. <input type="checkbox"/> The following information (Items G4–G10) is provided for community floodplain management purposes.		
G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate of Compliance/Occupancy Issued
G7. This permit has been issued for: <input type="checkbox"/> New Construction <input type="checkbox"/> Substantial Improvement		
G8. Elevation of as-built lowest floor (including basement) of the building: _____, _____ <input type="checkbox"/> feet <input type="checkbox"/> meters Datum _____		
G9. BFE or (in Zone AO) depth of flooding at the building site: _____, _____ <input type="checkbox"/> feet <input type="checkbox"/> meters Datum _____		
G10. Community's design flood elevation: _____, _____ <input type="checkbox"/> feet <input type="checkbox"/> meters Datum _____		
Local Official's Name	Title	
Community Name	Telephone	
Signature	Date	
Comments (including type of equipment and location, per C2(e), if applicable)		
		<input type="checkbox"/> Check here if attachments.





# Building Photographs



- ✓ Photographs are required for insurance rating.
- ✓ At least two photographs, showing at least the front and rear of the building.
- ✓ Help confirm values in Section C.
- ✓ The photos are not required for CRS compliance.

ELEVATION CERTIFICATE		BUILDING PHOTOGRAPHS		OMB No. 1660-0008	
		See Instructions for Item A8.		Expiration Date: November 30, 2018	
<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>				<b>FOR INSURANCE COMPANY USE</b>	
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		
<p>If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A8. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.</p>					
Photo One					
Photo One			Photo One		
Photo One Caption					
Photo Two					
Photo Two			Photo Two		
Photo Two Caption					

# Any Questions?


## Section A

- ✉ **A3- property Legal Description-Proper Parcel # or legal description from Deed.**
- ✉ **Diagram #**
- ✉ **Blank fields in A8 and A9.**
- ✉ **Providing backup documentation on engineered flood vents**

## Section B

 **Wrong NFIP #-Must list community name and NFIP # in B1**

 **Wrong index dates**

 **Item B-10: Where did the BFE come from, especially in unnumbered “A” zones**




## Section C

- ✉ **Understanding the distinguishing features of each diagram #**
- ✉ **Definition of finished construction.**
- ✉ **Information certified in C2(a-g) does not support diagram # used.**
- ✉ **No entry for C2e (machinery and equipment)**
- ✉ **Leaving field blank instead of using NA.**




# Correcting Elevation Certificates

**Do not mark EC with corrections!!**

## Section “B” errors

-  Send back to the surveyor
-  Separate memo attached to EC from Local Official
-  Note changes in comments section

## Bad elevations and section “C” errors

-  Send back to the original surveyor
-  Do a new elevation certificate
-  Use a different surveyor

# Helpful hints

- Make a “complete and correct” EC a condition for certificate of occupancy.
- Never assume the EC was filled out correctly because it has the seal on it.
- Establish a review process that determines if the EC is complete and correct.
- Fill out as much of the EC as you can at the time of the permit application (i.e.: section A and B).

# Review an Elevation Certificate



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

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

## ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

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

SECTION A - PROPERTY INFORMATION						FOR INSURANCE COMPANY USE
A1. Building Owner's Name					Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.					Company NAIC Number:	
City			State		ZIP Code	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)						
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)						
A5. Latitude/Longitude: Lat. _____ Long. _____ Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983						
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.						
A7. Building Diagram Number _____						
A8. For a building with a crawlspace or enclosure(s):						
a) Square footage of crawlspace or enclosure(s) _____ sq ft						
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade _____						
c) Total net area of flood openings in A8.b _____ sq in						
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No						
A9. For a building with an attached garage:						
a) Square footage of attached garage _____ sq ft						
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____						
c) Total net area of flood openings in A9.b _____ sq in						
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No						
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION						
B1. NFIP Community Name & Community Number				B2. County Name		B3. State
B4. Map/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 Base Flood Depth)	
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____						
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____						
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA						

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Replaces all previous editions.

Form Page 1 of 6



# Final Questions?

Thank you!



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