

NeFSMA Spring Meeting

April 24, 2014

Bill Jones CFM





FEMA

NATIONAL FLOOD INSURANCE PROGRAM

ELEVATION CERTIFICATE

AND

INSTRUCTIONS

2012 EDITION

**Surveyors
and the
FEMA
Elevation
Certificate**

FEMA/NFIP Business

- The FEMA Elevation Certificate is the only document that will be accepted for any FEMA/National Flood Insurance Program (NFIP) Business (Except Elevation Information Form in the MT-1 kit)
- Flood Insurance rating purposes
- Letters of Map Change
- Community Rating System Communities (CRS)
- Not *required* for floodplain management compliance certification

Purpose of the Elevation Certificate

(Page 1 of the Complete EC and Instructions)

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

(Continued)

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

Screech!!!



- The Biggert-Waters Flood Insurance Reform Act of 2012 was passed on July 6, 2012.

BW-12

- NFIP debt in 2012 was \$18 Billion (Pre-Sandy)
- NFIP must create plan to repay debt in 10 years
 - Program is to become risk based
 - Subsidized premiums are to be eliminated
 - Premium cap increased from 10% to 20 % per yr.

BW-12

- Immediate impacts (Triggers):
 - Property purchased on or after July 6, 2012
 - New policies effective on or after July 6, 2012
 - Lapsed policies reinstated on or after Oct. 4, 2012

BW-12

- Pre-FIRM structures will have a 1-year provisional rating period when elevation certificates are optional.
- Following that provisional period, an elevation will be required to risk rate the building.
(All flood insurance policies will need elevation certificates, except Preferred Risk Policies [PRP])

Homeowners Flood Insurance Affordability Act (HFIAA)



March 21, 2014: Mid-Course Adjustment!

HFIAA

- Triggers Gone.
- Cap premium increases to 18%
- Post-FIRM Grandfather reinstated. (Partial)
 - Policies issued after March 21, 2014 and newly mapped areas will over time become full risk rated. (If you never get a new map, your Post-FIRM grandfather will remain in effect)



Back on Track

U.S. DEPARTMENT OF HOMELAND SECURITY
 FEDERAL EMERGENCY MANAGEMENT AGENCY
 National Flood Insurance Program

ELEVATION CERTIFICATE

IMPORTANT: Follow the instructions on pages 1-9.

OMB No. 1660-0008
 Expiration Date: July 31, 2015

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: NAD 1927 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? Yes 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? Yes 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 A0, use base flood depth)	

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

B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/Source: _____

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

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: _____ Vertical Datum: _____

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.

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 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.

Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor? Yes No

Certifier's Name		License Number	
Title	Company Name		
Address	City	State	ZIP Code
Signature	Date	Telephone	

PLACE SEAL HERE

The correct form

- Current EC Expires 7/31/2015
- Use of 2015 Cert, for NFIP business, was mandatory after August 1, 2013
- FEMA allows a 1-year transition. Earlier or current EC is valid for one year

CATE
Pages 1-9.

OMB No. 1660-0008
Expiration Date: July 31, 2015

SECTION	FOR INSURANCE COMPANY USE
Policy No.	
Company NAIC Number:	
ZIP Code	

CRS and Good Practice

- The Community Rating System **REQUIRES** that ECs be filled out in their entirety. All applicable blanks **MUST** be completed.
- N/A or 0 (Zero) is appropriate in all blanks where data was not collected/needed.

– DeWitt

Omaha

– Fremont

Papillion

– Lincoln

Valley

CRS EC Guidance: <http://crsresources.org/300-3>

ELEVATION CERTIFICATE

IMPORTANT: Follow the instructions on pages 1-9.

OMB No. 1660-0008
Expiration Date: July 31, 2015

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: NAD 1927 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) No. 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? Yes 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? Yes No

ELEVATION CERTIFICATE

IMPORTANT: Follow the instructions on pages 1-9.

OMB No. 1660-0008
Expiration Date: July 31, 2015

SECTION A - PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

A1. Building Owner's Name _____	Policy Number: _____
A2. Building Street _____, Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. City _____ State _____ ZIP Code _____	Company NAIC Number: _____
A3. Property Description (e.g., Assessor's 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):	A9. For a building with an attached garage:
a) Square footage of crawlspace or enclosure(s) _____ sq ft	a) Square footage of attached garage _____ sq ft
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade _____	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 A8.b _____ sq in	c) Total net area of flood openings in A9.b _____ sq in
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No	d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No

**Building
Diagram
Number**

ELEVATION CERTIFICATE

IMPORTANT: Follow the instructions on pages 1-9.

OMB No. 1660-0008
Expiration Date: July 31, 2015

SECTION A - PROPERTY INFORMATION

SE

Openings/Flood
Vents in
Crawlspace

Openings in
Attached Garages

A1. Building Owner _____

A2. Building Street _____, and/or Bldg. No.) or P.O. Route and Box No.
City _____ State _____

A3. Property Description _____ (Parcel Number, Legal Description, etc.)

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) _____

A5. Latitude/Longitude: Lat. _____ Long. _____ Horizontal Datum: NAD 1927 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) No. 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? Yes 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? Yes No

Openings/Flood Vents: A8 and A9

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

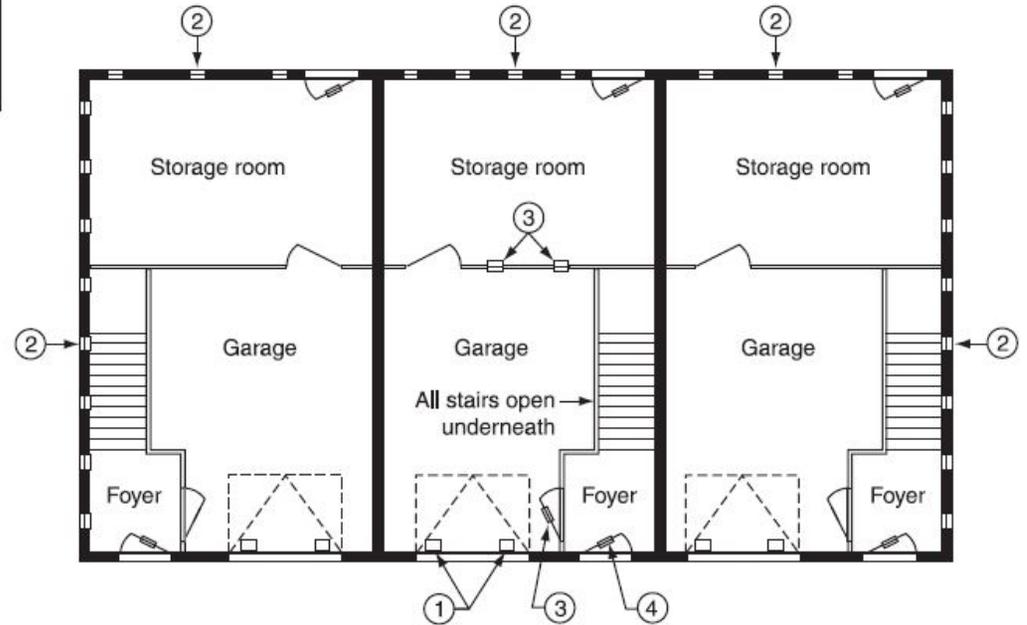
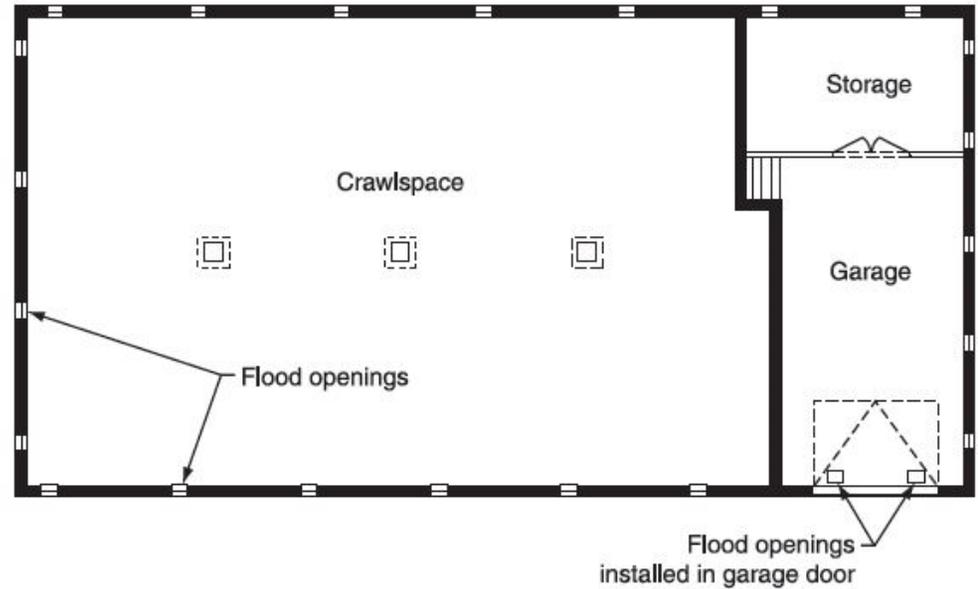
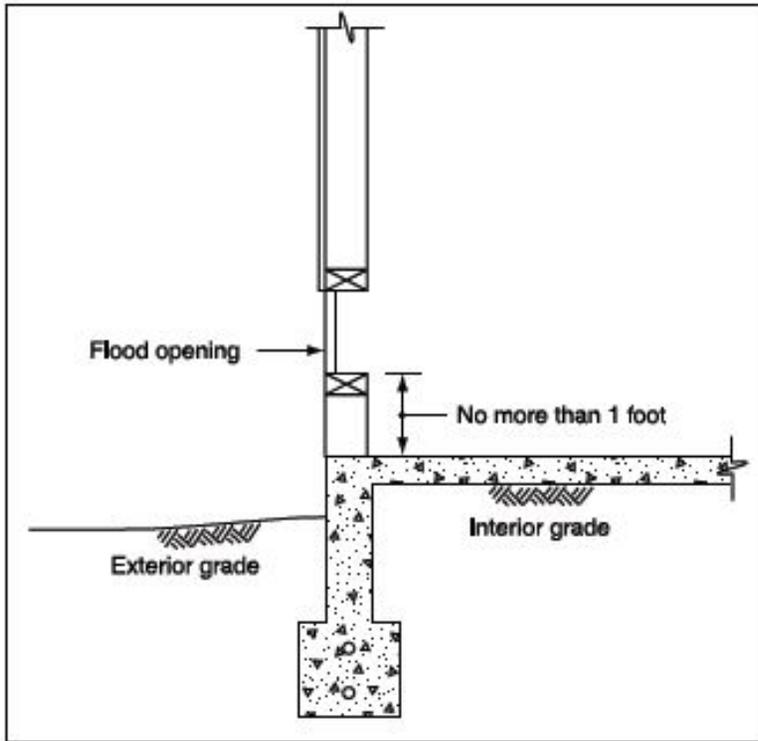
a) Square footage of crawlspace or enclosure(s) _____ sq ft

b) No. 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? Yes No

- a) Square footage of enclosure is calculated from the outside dimension
- b) Openings must be within 1-foot of grade (outside or inside) and only area below BFE can be calculated
- c) “NET” opening area must be calculated
- d) If engineered openings are being used, engineers certification must be attached to the certificate.



- ① Openings in garage door
- ② Openings in exterior wall
- ③ Openings in interior wall/door
- ④ Openings in exterior door

- Minimum 2 openings on more than one wall.
- All interior areas below BFE must be vented.

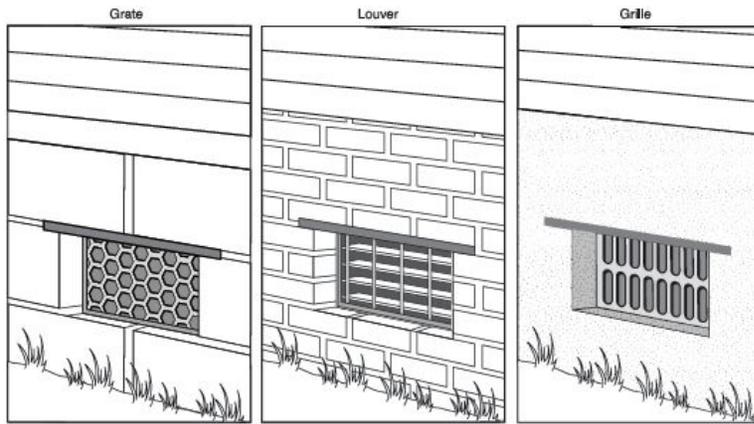
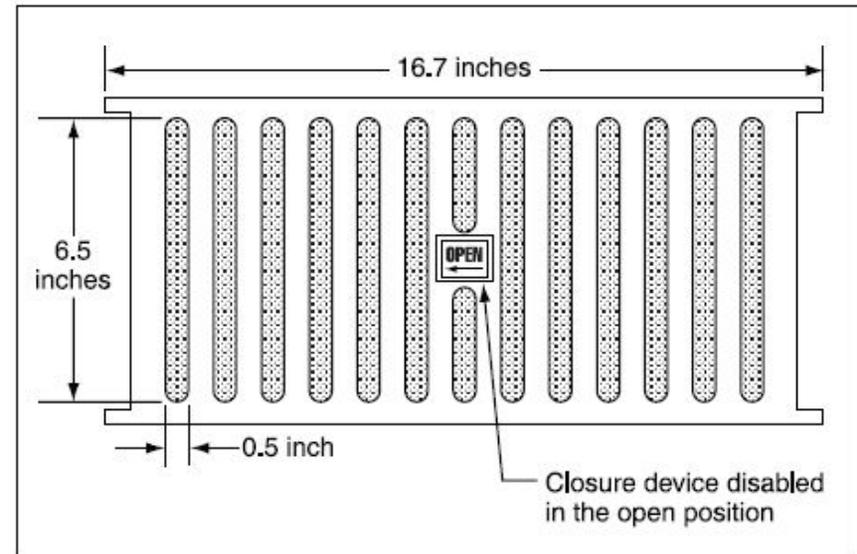
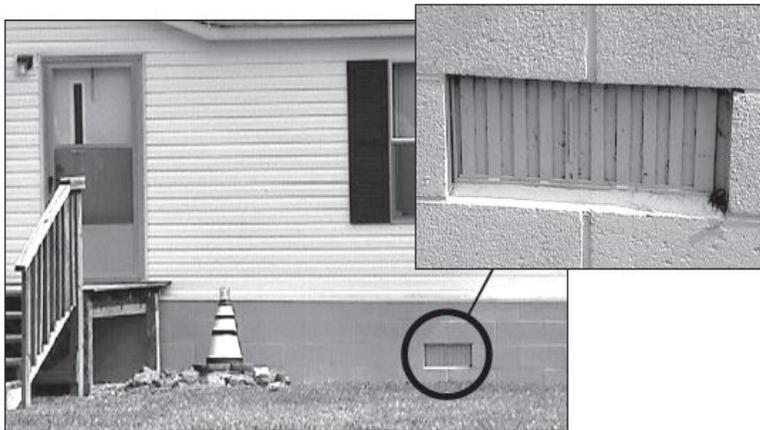


Figure 16. Examples of typical air vents used as flood openings (net open area varies)



EXAMPLE

Gross - $16.7 \times 6.5 = 108.6$ sq. in.
 Net - $6.5 \times 0.5 \times 13 = 42.5$ sq. in.

- Net opening area must be calculated
- No human intervention. Closures must be disabled
- Hardware cloth that would fail if blocked by debris need not be calculated (for net)
- Popcorn foam insulation that would fail is allowed for thermal protection
- *****Minimum requirement is one square inch of net opening for each square foot of enclosed area***



More Information than you
may really want to know!!!

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



FEMA

SECTION B

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					

Where do you get the FIRM?

<https://msc.fema.gov/>

The screenshot shows the FEMA Map Service Center website. The browser address bar displays the URL: <https://msc.fema.gov/webapp/wcs/stores/servlet/CategoryDisplay?storeId=10001&catalogId=10001>. The page title is "FEMA Map Service Center". The main content area is titled "Current FEMA Issued Flood Maps" and includes instructions: "Use the following selection boxes to find your area of interest. If you want all maps for a particular jurisdiction click the 'Get Kit' button which will appear to the right." Below this, there is a "Show FEMA IDs" button and a table with the following data:

		FEMA ID		
1	Select a State, District or Territory: NEBRASKA	31	To order state kits, please contact customer service at (877) 336-2627.	
2	Select a County, Parish, etc: CASS COUNTY	31025		<input type="button" value="Get County Kit"/>
3	Select a Community: LOUISVILLE, VLG/CASS CO	310031		<input type="button" value="Get Community Kit"/>
4	<input type="button" value="Get Current FEMA issued Flood Maps"/>			

* designates unincorporated areas

The footer contains the following text: FEMA.gov | Accessibility | Privacy Policy | FAQ | Site Help | Site Index | Contact Us
 FEMA Map Service Center, P.O. Box 3617 Oakton, Virginia 22124-9617 Phone: (877) 336-2627
 Adobe Acrobat Reader required to view certain documents. Click here to download.

[Home](#) > [Product Catalog](#) > [FEMA Issued Flood Maps](#)

Current FEMA Issued Flood Maps

State : NEBRASKA

County : CASS COUNTY

Community : LOUISVILLE,VLG/CASS CO

In order to show enough detail, the flood maps for most jurisdictions are divided up into multiple map panels. This page lists up to 20 map panels for the jurisdiction that you selected. You can view or purchase each of the items listed. If there are more than 20 panels listed, you can view additional pages of results.

If you don't know which panel you want, you can view the index panels to determine the correct panel number. They are listed at the top and include "IND" in the item ID. The index map will open in separate viewer window. Once you have identified the correct panel number, you can return to this window and find the matching item ID to view or buy it. Alternatively, you can use the "Map Search" link above to search by address or view an interactive index map for the area.

Click the *View* button to view a map or to make a FIRMette (a printable copy of your area of interest). To purchase a map, click the *Buy* button to show pricing information. If you would like all the maps for the community, then click the *Get Community Kit* link above.

Please be aware that some maps may have been amended by Letter of Map Change (LOMC) since publication. These maps have a "plus" sign in the "Show LOMC" column. Please note, that only LOMCs issued from June 1, 1997 through April 11, 2014 are available for viewing. To determine if additional LOMCs have been issued for a map, contact your local government office responsible for floodplain management. Flood Boundary and Floodway Maps may also have been produced for this community. To view or order these, select the Flood Insurance Studies link on the catalog page.

A total of 4 items found. Displaying map item 1 through 4.
Sort by:

Item ID ▲	Item Name	Effective Date	Show LOMC	File Size (Mb)	View	Buy
31025CIND0A	FLOOD INSURANCE RATE MAP (FIRM)	11/26/2010		1.0 Mb		
31025C0070D	FLOOD INSURANCE RATE MAP (FIRM)	11/26/2010	+	48.6 Mb		
31025C0205D	FLOOD INSURANCE RATE MAP (FIRM)	11/26/2010	+	50.6 Mb		
31025C0210D	FLOOD INSURANCE RATE MAP (FIRM)	11/26/2010	+	50.2 Mb		

Item ID ▲	Item Name	Effective Date	Show LOMC	File Size (Mb)	View	Buy
31109C0295G	FLOOD INSURANCE RATE MAP (FIRM)	04/16/2013	+	1.2 Mb		
31109C0305F	FLOOD INSURANCE RATE MAP (FIRM)	02/18/2011	-	8.5 Mb		
REVALIDATION	09-07-1969V-315273	04/17/2013				
LOMA	11-07-0841A-315273	03/01/2011				
LOMA	11-07-0853A-315273	02/22/2011				
LOMA	11-07-0854A-315273	02/22/2011				
LOMA	11-07-0855A-315273	02/22/2011				
LOMA	11-07-0856A-315273	02/22/2011				
LOMA	11-07-0857A-315273	02/22/2011				
LOMA	11-07-0858A-315273	02/22/2011				
LOMA	11-07-0859A-315273	02/22/2011				
LOMA	11-07-0860A-315273	02/22/2011				
LOMA	11-07-0861A-315273	02/22/2011				
LOMA	11-07-0862A-315273	02/22/2011				
LOMA	11-07-0863A-315273	02/22/2011				
LOMA	11-07-0864A-315273	02/22/2011				
LOMA	11-07-0865A-315273	02/22/2011				
LOMA	11-07-0866A-315273	02/22/2011				
LOMA	11-07-0867A-315273	02/22/2011				
LOMA	11-07-0868A-315273	02/22/2011				
LOMA	11-07-0869A-315273	02/22/2011				
LOMA	11-07-0870A-315273	02/22/2011				
LOMA	11-07-0871A-315273	02/22/2011				
LOMA	11-07-0872A-315273	02/22/2011				
LOMA	11-07-1018A-315273	03/08/2011				
LOMA	11-07-1022A-315273	03/08/2011				
LOMA	11-07-1416A-315273	03/10/2011				
LOMA	11-07-1456A-315273	04/28/2011				
LOMA	11-07-1902A-315273	06/21/2011				
LOMA	11-07-1910A-315273	06/14/2011				
LOMA	11-07-3310A-315273	10/20/2011				
LOMC	11-07-3546A-315273	11/22/2011				
LOMC	12-07-0602A-315273	12/29/2011				
LOMA	12-07-1425A-315273	03/06/2012				
LOMA	12-07-3297A-315273	10/16/2012				
LOMR	13-07-1915P-315273	06/27/2014				
LOMR-F	14-07-0531A-315273	01/16/2014				
LOMA	14-07-1038A-315273	03/18/2014				
REVALIDATION	MICS-30502V-315273	02/19/2011				



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					

- B1. Community Name and Community Number are on the FIRM
 - Community number is 6 digit number. Jurisdiction on countywide FIRM is labeled. ETJ, if included on FIRM are part of community, not county.
- B4. Map/Panel Number: Countywide is 10 digit number (State FIP#, County FIP# followed by C, followed by Panel#)
 (Do NOT include Suffix on B4)
- B5. Suffix letter (Each update gets a new suffix. Suffix may vary within county or community).

NFIP NATIONAL FLOOD INSURANCE PROGRAM	PANEL 0177D			
	FIRM FLOOD INSURANCE RATE MAP			
	SALINE COUNTY, NEBRASKA AND INCORPORATED AREAS			
	PANEL 177 OF 400 (SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)			
	<u>CONTAINS:</u>			
	<u>COMMUNITY</u>	<u>NUMBER</u>	<u>PANEL</u>	<u>SUFFIX</u>
	CRETE, CITY OF	310186	0177	D
	SALINE COUNTY	310472	0177	D
	<small>Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.</small>			
			MAP NUMBER 31151C0177D	
		EFFECTIVE DATE NOVEMBER 4, 2010		
Federal Emergency Management Agency				

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					

- B6. FIRM Index Date. Indexes are provided with panel updates. All panels may not be updated. Most recent Index will provide latest suffix data to ensure use of latest FIRM.
- B7. FIRM Panel Effective or Revision Date. (Portions of some panels may have Inset LOMRs added)
- B8 Flood Zone (s). If more than one zone, include all that impact the survey. Buildings are rated by the greatest hazard to the structure/area. (If only a corner of a building is in Zone A, that rate applies to the entire structure.

NFIP NATIONAL FLOOD INSURANCE PROGRAM	PANEL 0177D			
	FIRM FLOOD INSURANCE RATE MAP			
	SALINE COUNTY, NEBRASKA AND INCORPORATED AREAS			
	PANEL 177 OF 400 (SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)			
	<small>CONTAINS:</small>			
	<small>COMMUNITY</small>	<small>NUMBER</small>	<small>PANEL</small>	<small>SUFFIX</small>
	CRETE, CITY OF	310186	0177	D
	SALINE COUNTY	310472	0177	D
	<small>Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.</small>			
			MAP NUMBER 31151C0177D	
		EFFECTIVE DATE NOVEMBER 4, 2010		
<small>Federal Emergency Management Agency</small>				

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					

- B9. BFE. Unless you are interpolating BFE from Stream Profile from Flood Insurance Study, or from NDNR BFE Certificate, this information should be provided by PE or other source. BFE information on FIRM is for Insurance Purposes ONLY.
- AO Zones – Establish an elevation of “natural grade” plus the depth factor.
(Depth Number = Natural Grade elevation plus depth)
- Flood insurance rating in AO zones looks at Highest Adjacent Grade (HAG), not Lowest Adjacent Grade (LAG). Natural Grade may be difficult to establish if the site has been altered.

AO Zone

- FEMA Defines: Natural Grade--The grade unaffected by construction techniques such as fill, landscaping, or berming.
- AO Zones are depths of flooding. A BFE would be determined by using “Natural Grade and adding the depth of flooding (Assume 2-foot depth if not shown on FIRM)



NEBRASKA DEPARTMENT OF NATURAL RESOURCES

NDNR

CERTIFICATE OF COMPLIANCE

**FOR NEW BUILDINGS IN FIRM ZONE AO
AND
INSTRUCTIONS**

Located in NDNR
Digital Desk
Reference

[http://dnr.nebraska.gov/fpm
/digital-desk-reference](http://dnr.nebraska.gov/fpm/digital-desk-reference)

Tab 1: AO Zone Certificate

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

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					

- B10. Source of BFE listed at B9
- B11. Datum for BFE provided at B9
- B12. Coastal data does not apply to Nebraska BUT must be completed (NO in check box)

SECTION C

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: _____ Vertical Datum: _____

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) | _____ . _____ | <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 |

C1. BFE from plans and during construction shows elevations at that point. As-Built EC is required to certify what will be permitted/insured.

C2. Asks for the benchmark used for the site and the vertical datum of the bench.

- Also asks for the datum used below (a through h)

**C2a – Bottom floor is key to insurance rating and compliance.

**C2a is NOT always the floor used to determine “Lowest Floor”

**Reference A7 and diagrams in instructions.

NOTE---The top of the bottom floor is NOT the ceiling of that lowest enclosed area.

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: _____ Vertical Datum: _____

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) | _____ . _____ | <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 |

C2 b. Next highest floor becomes “regulatory lowest floor” if the lowest floor is exempted because of adequate flood vents, or approved crawl space in a community that has adopted regulations to allow subgrade crawlspaces. (FEMA Technical Bulletin 11)



Technical Bulletin

Crawlspace Construction

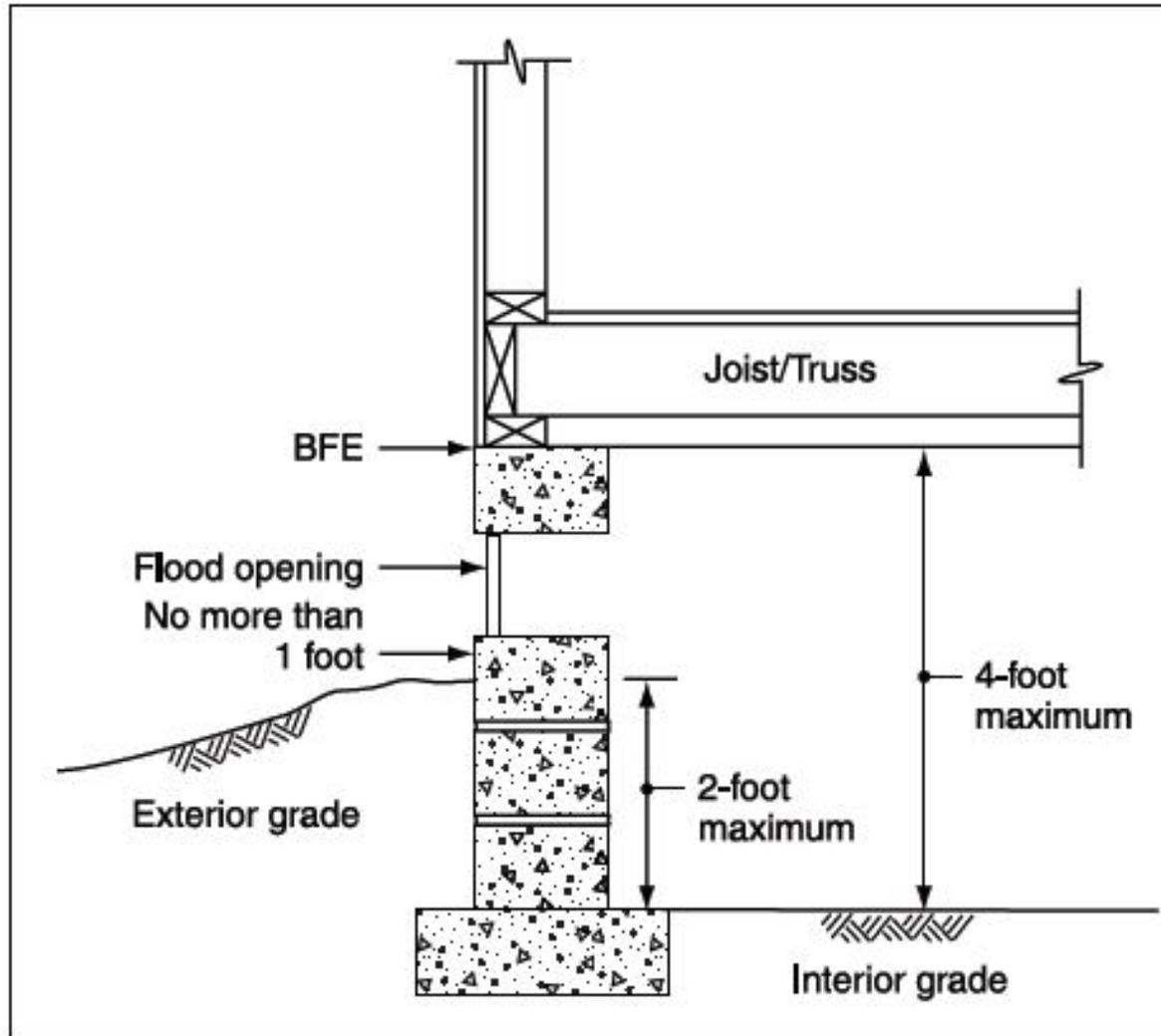
for Buildings Located in Special Flood Hazard Areas
National Flood Insurance Program Interim Guidance

FEMATB-11 / November 2001



FEMA

FEMA Approved Crawlspace*



*Community must adopt TB 11-01 by ordinance to allow subgrade crawlspaces



Back on Track!

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: _____ Vertical Datum: _____

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) | _____ . _____ | <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 |

C2 c – V Zones Only – Enter N/A here

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: _____ Vertical Datum: _____

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) | _____ . _____ | <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 |

C2 d – Attached garage. Must be physically attached to the building. (Breezeway?)
 Compliance is determined by “openings (Section A8 and C2 e) or elevation

There is no special Diagram (A7) for attached garage, as it is self explanatory

If attached garage floor is subgrade, the garage floor would become the lowest floor unless there was a floor at a lower elevation.

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: _____ Vertical Datum: _____

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) | _____ . _____ | <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 |

C2 e – This would include any machinery that is part of the function as a building: furnace, water heater, air conditioner compressor, power panel etc.

Instructions say to describe the equipment and location in “Comments” section on Page 2

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: _____ Vertical Datum: _____

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) | _____ . _____ | <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 |

C2 f – Lowest Adjacent Grade (LAG) next to the building.

Bottom of a window well is LAG (In some cases with high extensive intervening ground, this may be excluded. “Documentation and photos required”)

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: _____ Vertical Datum: _____

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) | _____ . _____ | <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 |

C2 g – Highest Adjacent Grade (HAG) next to the building.

Used in AO Zones

-Sheet flow includes velocity calculations.

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: _____ Vertical Datum: _____

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) | _____ . _____ | <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 |

C2 h – Lowest adjacent grade at lowest elevation of deck or stairs, including structural support

-If a deck is attached to the structure and the base of the deck post is located in a SFHA, for insurance purposes, the entire structure is rates as being within the more restrictive zone.

-Retrofit of deck (detach it from building and make it self supporting would remove it from being a part of the building. A deck is typically, not walled and roofed which would make it uninsurable.



C2 h

C2 h





C2 h



Section D

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.*

Check here if comments are provided on back of form.

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

FEMA Form 086-0-33 (7/12)

See reverse side for continuation.

Replaces all previous editions.

Note checkboxes:

- Comments provided on back of form
- Attachments
- Lat/Long provided by licensed land surveyor

ELEVATION CERTIFICATE, page 2

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 PO. 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

Signature _____ Date _____

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

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.

E1. 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).

a) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ feet meters above or below the HAG.

b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ feet meters above or below the LAG.

E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8–9 of instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____ feet meters above or below the HAG.

E3. Attached garage (top of slab) is _____ feet meters above or below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is _____ feet meters above or below the HAG.

E5. 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, 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 _____

_____ 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. Check the measurement used in Items G8–G10. In Puerto Rico only, enter meters.

G1. 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. 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 _____
-------------------------	------------------------------	---

G7. This permit has been issued for: New Construction Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building: _____ feet meters Datum _____

G9. BFE or (In Zone AO) depth of flooding at the building site: _____ feet meters Datum _____

G10. Community's design flood elevation: _____ feet meters Datum _____

Local Official's Name _____ Title _____

Community Name _____ Telephone _____

Signature _____ Date _____

Comments _____

_____ Check here if attachments.

ELEVATION CERTIFICATE, page 2

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 PO. 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

Signature _____ Date _____

SECTION 'D' CONTINUED:

- Top area duplicates information from Section A – If single sided copy of form.
- Section D “Comments” is for anything that is unusual or anything needing clarification
- If more space is needed, it can be added as an attachment.

Section E

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

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.

- E1. 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).
- a) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ . _____ feet meters above or below the HAG.
- b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ . _____ feet meters above or below the LAG.
- E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8–9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____ . _____ feet meters above or below the HAG.
- E3. Attached garage (top of slab) is _____ . _____ feet meters above or below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is _____ . _____ feet meters above or below the HAG.
- E5. 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.
-

AO Zone information can be completed by property owner/agent .

This area for insurance purposes only

Section A, B, C, and D are to be used with BFE.

Section F

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

Check here if attachments.

To be used by Owner/Agent to sign off that non-surveyor information is accurate.

Section G

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. 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. 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
-------------------	------------------------	---

- G7. This permit has been issued for: New Construction Substantial Improvement
- G8. Elevation of as-built lowest floor (including basement) of the building: _____ . _____ feet meters Datum _____
- G9. BFE or (in Zone AO) depth of flooding at the building site: _____ . _____ feet meters Datum _____
- G10. Community's design flood elevation: _____ . _____ feet meters Datum _____

Local Official's Name	Title
-----------------------	-------

Community Name	Telephone
----------------	-----------

Signature	Date
-----------	------

Comments

_____ Check here if attachments.

Community officials can copy data from older certificates onto new forms and sign here and attach copy of originals.

Typically, surveyors will not use Section G.

BUILDING PHOTOGRAPHS
See Instructions for Item A6.

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:	
<p>If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." 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>				

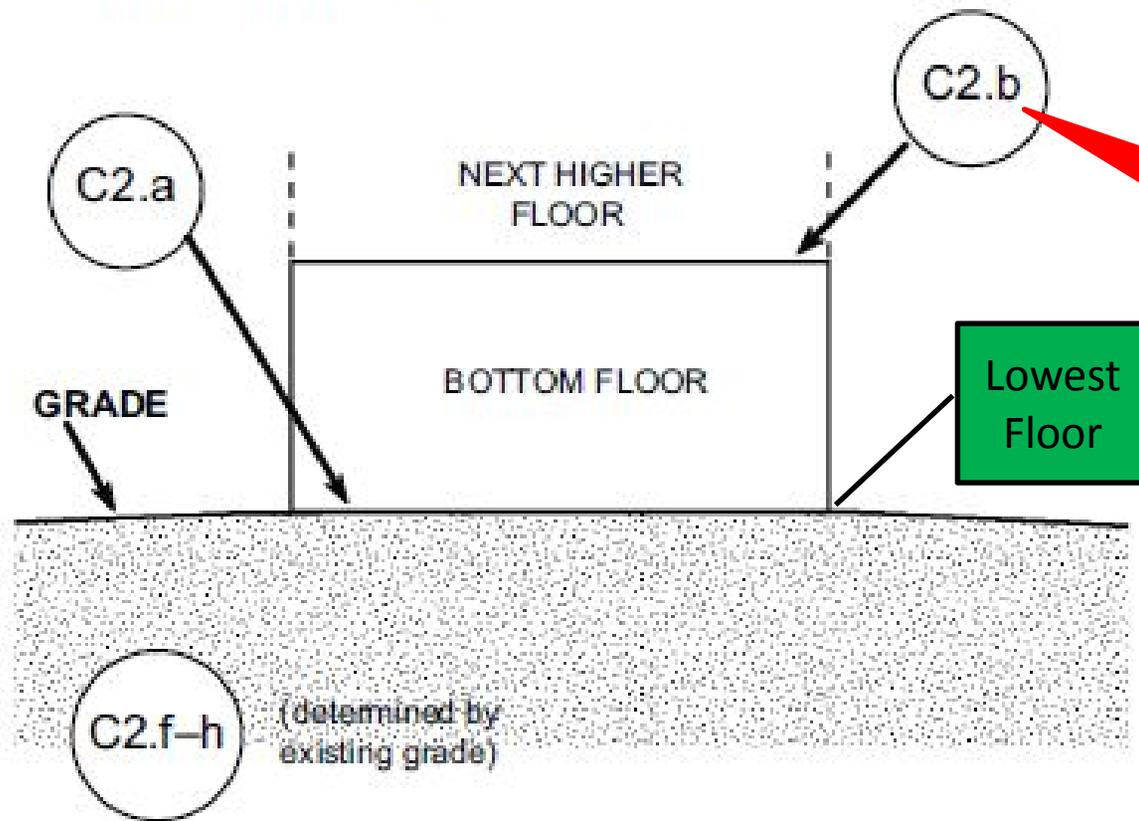
- For insurance purposes a minimum of 2 photos required. Split levels need 4.
- Multiple sheets, if needed
- Photos taken within 90 days of survey.
- Color digital photos minimum 3X3 inches.
- Vent openings helpful
- Documentation of what was surveyed protects the surveyor as to what he was certifying.

Diagrams

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.*



Description of building type

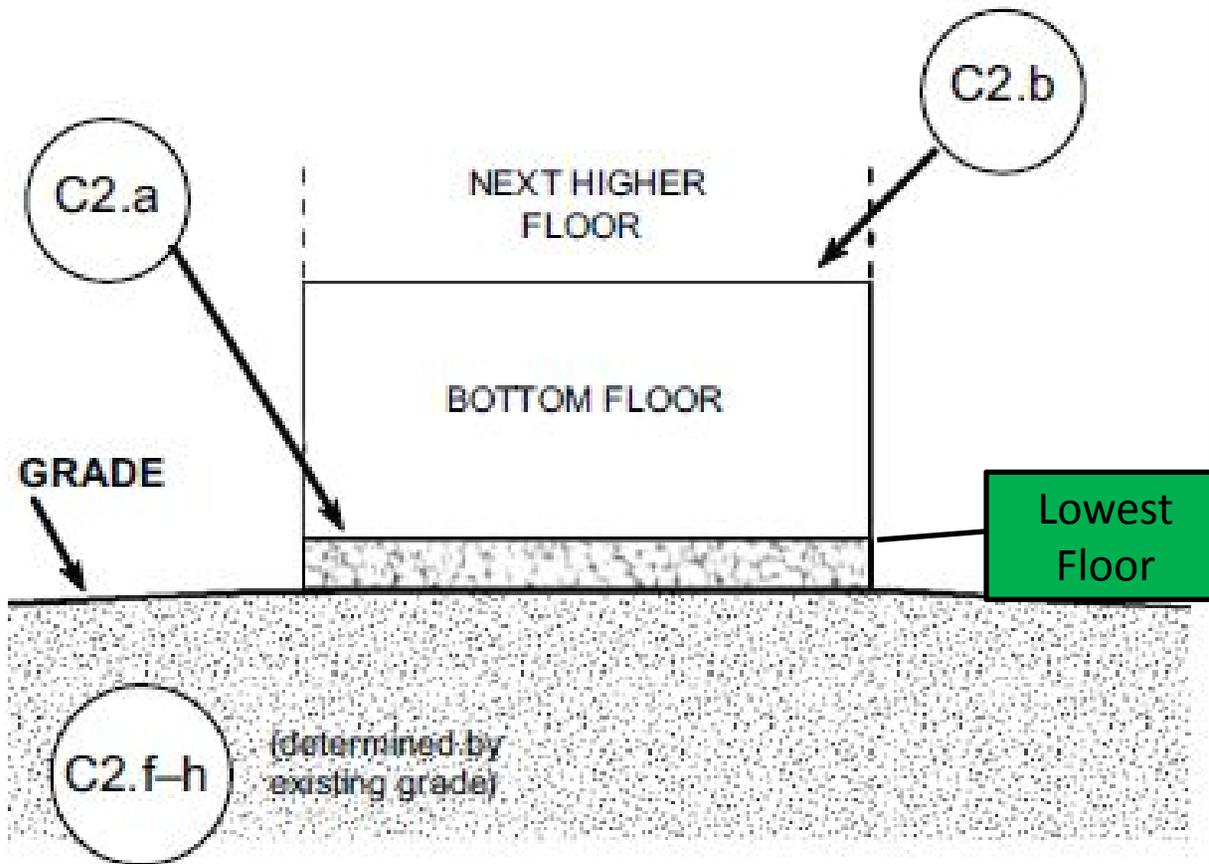
Features to distinguish this diagram from others

Reference to Elevations from Section C2

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.*



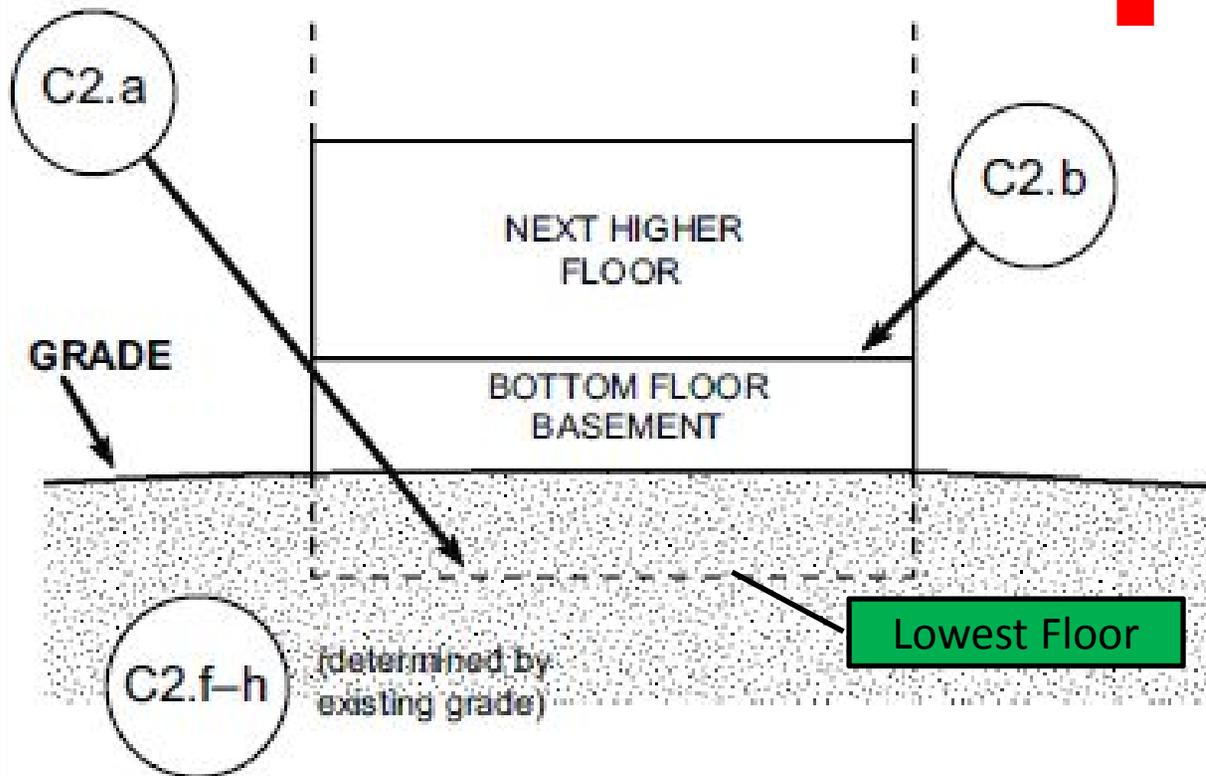
Diagrams

If C2.a is 1-foot above BFE, Openings are not required.

DIAGRAM 2

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.*



Diagrams

Typical Nebraska Basement.

KEY: Subgrade on all sides.

TB 11 crawlspaces (See Diagram 9)

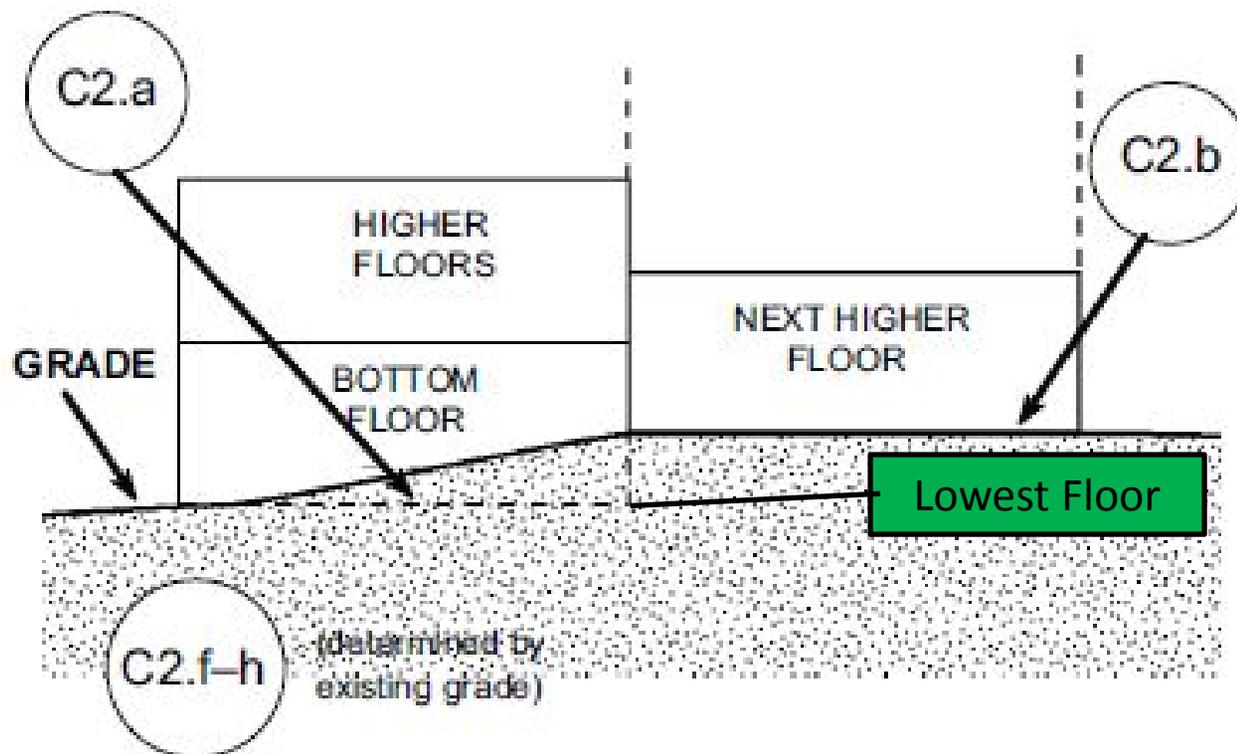
New construction:
Unless C2.a is 1-foot Above BFE this structure will not be compliant if a residential structure

↑ See Note at bottom of page. (Further Defines "Basement)

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.*

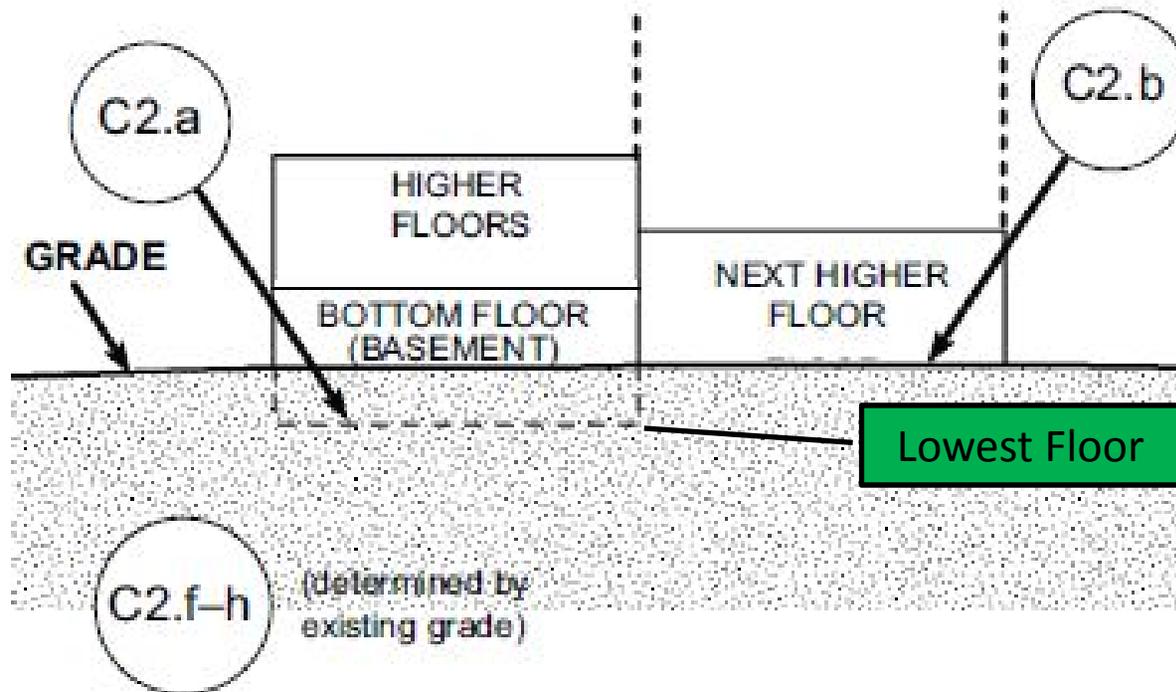


Diagrams

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.*

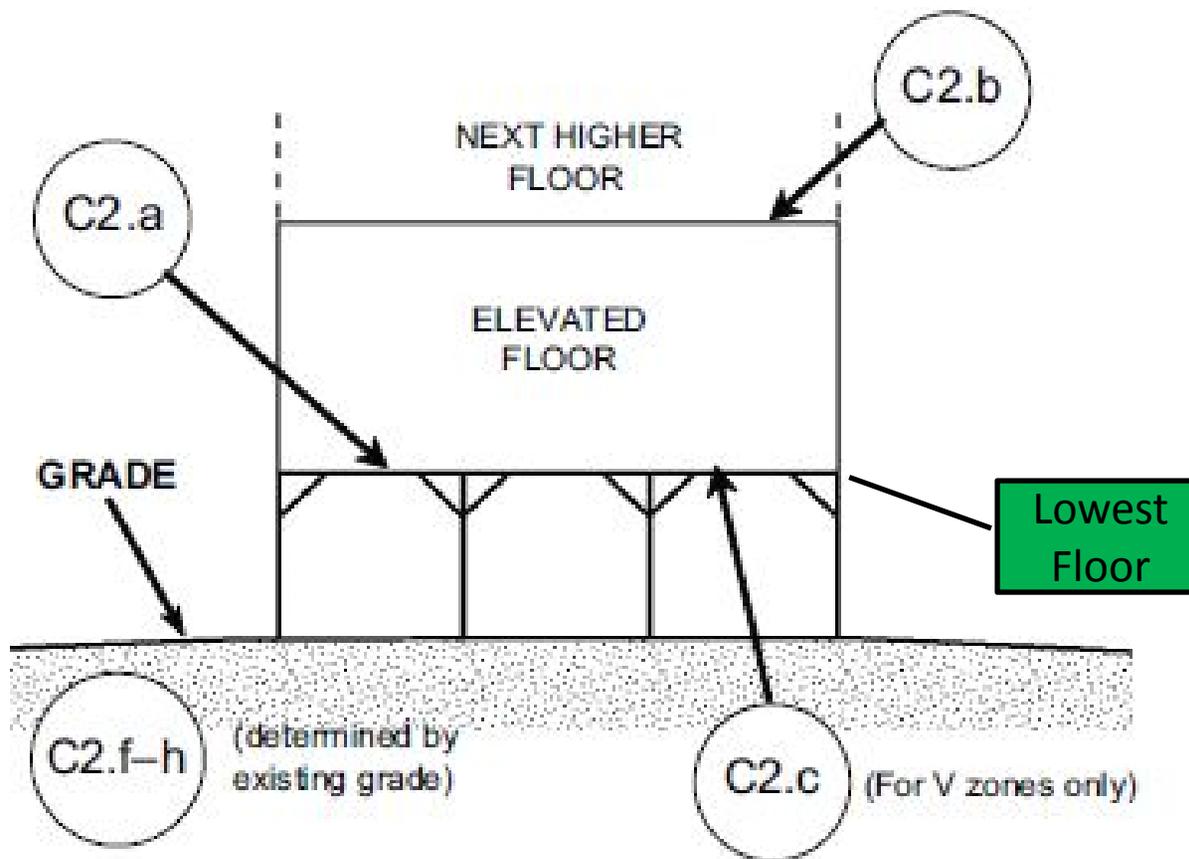


Diagrams

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).

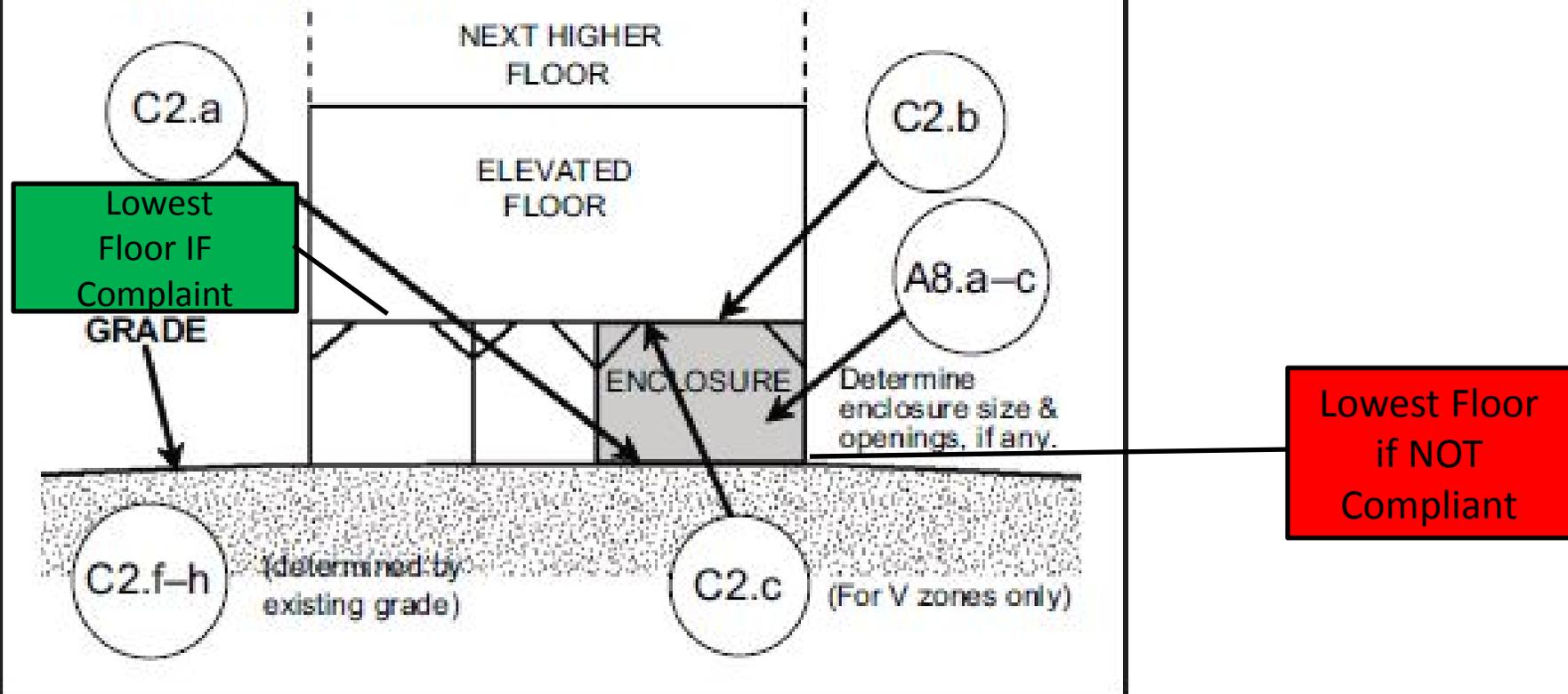


Diagrams

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.

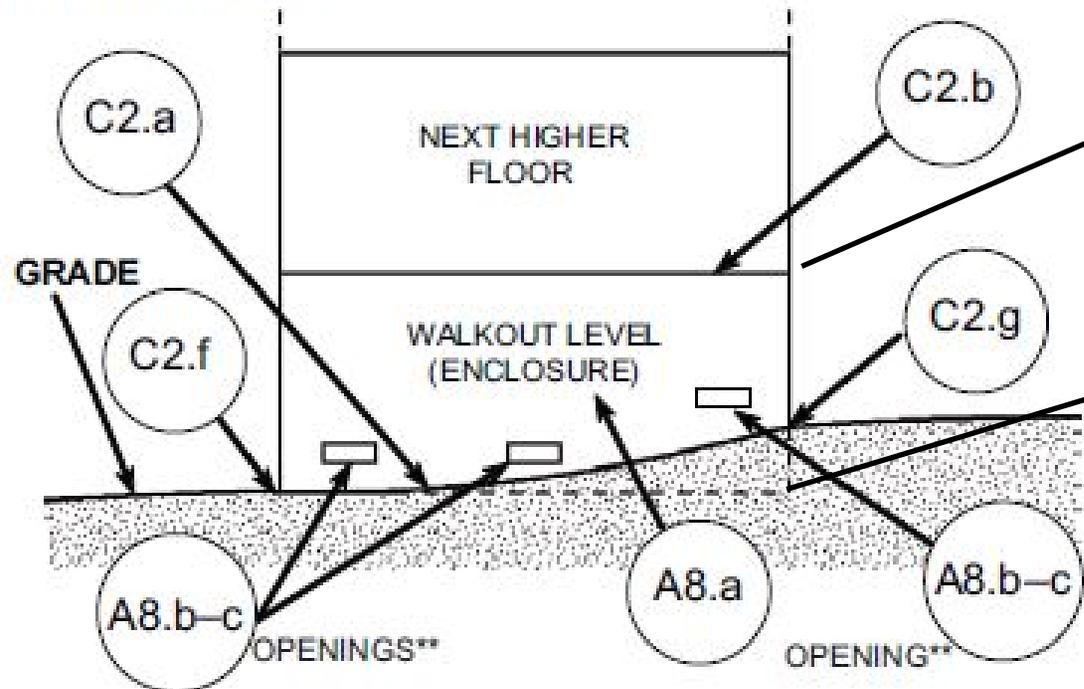


Diagrams

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.



Diagrams

No Crawlspace

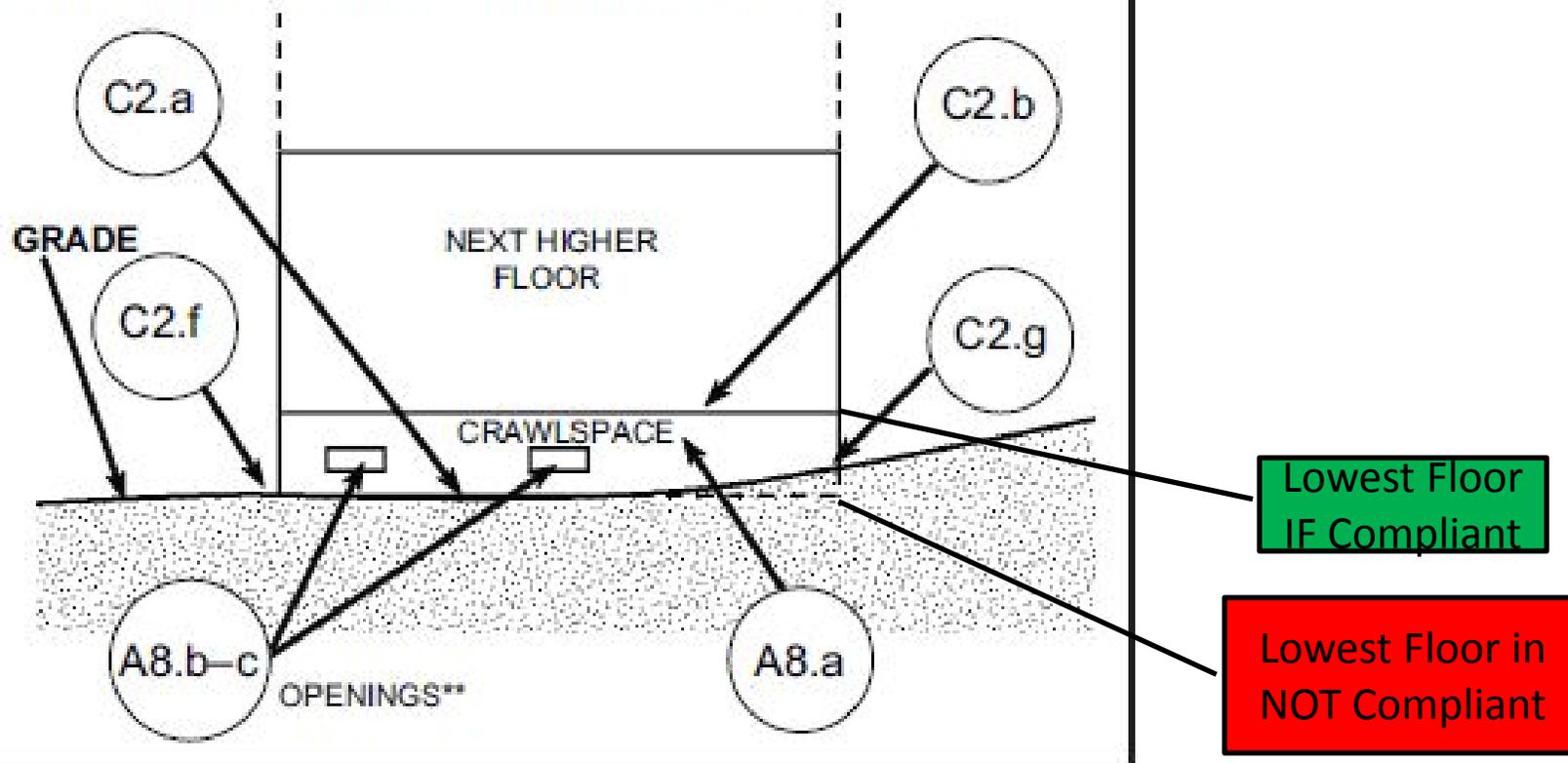
Lowest floor
IF Compliant

Lowest Floor if NOT
Compliant

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.



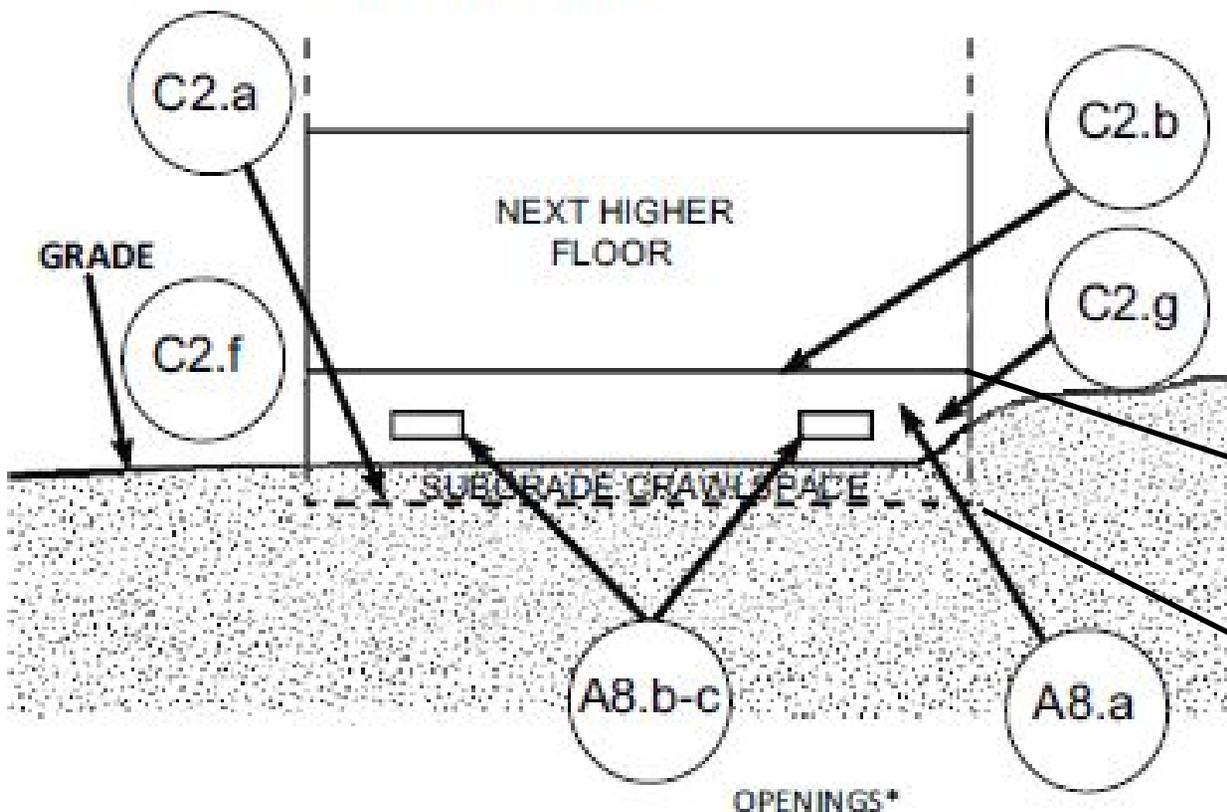
Diagrams

Crawl is NOT subgrade on all sides.

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 2.)



Diagrams

- Crawlspace IS subgrade on all sides.
- Crawlspace must meet 2 + 2 Rule and adequate openings AND TB 11 adopted into floodplain regulations.

Lowest Floor IF
Complaint & TB 11
Adopted

Lowest Floor in NOT
Complaint and TB 11
Adopted

Resources

- FEMA Map Service Center:
 - <https://msc.fema.gov/>
- Nebraska DNR Floodplain interactive map:
 - <http://dnr.nebraska.gov/fpm/using-the-floodplain-interactive-map>
- Elevation Certificate video training:
 - [http://nfiptraining.com/EC MADE EZ VIDEOS.php](http://nfiptraining.com/EC_MADE_EZ_VIDEOS.php)
- This presentation:
 - <http://dnr.nebraska.gov/fpm/resources>
- DNR Benchmark Database:
 - <http://dnr.nebraska.gov/benchmark-data>

Questions?



