

Elevation Certificate Training

May 15, 2024



FEMA



ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

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 (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Number: _____	
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): _____	
A5. Latitude/Longitude: Lat. _____ Long. _____ Horiz. Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983 <input type="checkbox"/> WGS 84	
A6. Attach at least two and when possible four clear color photographs (one for each side) of the building (see Form pages 7 and 8).	
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) Is there at least one permanent flood opening on two different sides of each enclosed area? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade: Non-engineered flood openings: _____ Engineered flood openings: _____	
d) Total net open area of non-engineered flood openings in A8.c: _____ sq. in.	
e) Total rated area of engineered flood openings in A8.c (attach documentation – see Instructions): _____ sq. ft.	
f) Sum of A8.d and A8.e rated area (if applicable – see Instructions): _____ sq. ft.	
A9. For a building with an attached garage:	
a) Square footage of attached garage: _____ sq. ft.	
b) Is there at least one permanent flood opening on two different sides of the attached garage? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade: Non-engineered flood openings: _____ Engineered flood openings: _____	
d) Total net open area of non-engineered flood openings in A9.c: _____ sq. in.	
e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instructions): _____ sq. ft.	
f) Sum of A9.d and A9.e rated area (if applicable – see Instructions): _____ sq. ft.	
SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION	
B1.a. NFIP Community Name: _____	B1.b. NFIP Community Identification Number: _____
B2. County Name: _____	B3. State: _____ B4. Map/Panel No.: _____ B5. Suffix: _____
B6. FIRM Index Date: _____	B7. FIRM Panel Effective/Revised Date: _____
B8. Flood Zone(s): _____	B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth): _____
B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9: <input type="checkbox"/> FIS <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other: _____	
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	
B13. Is the building located seaward of the Limit of Moderate Wave Action (LiMWA)? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Welcome

Announcements

- 1.5 hours Continuing Education Credit (CEC) approved through the Association of State Floodplain Managers (ASFPM) for Certified Floodplain Managers (CFMs®).

Instructors

- David Lopez, CFM, Assistant Chief, Floodplain Management Office, Houston Public Works
- Brian Bartley, CFM, Floodplain Specialist, FEMA Region 6
- Belle Gonzalez, CFM, Texas Water Development Board (TWDB)

City of Houston Floodplain Office Leads

- Choyce Morrow, P.E., CFM, City of Houston Managing Engineer, Floodplain Management Office
- Sandra Deshotel, MBA, CFM, City of Houston CRS Coordinator

Webinar Hosts

- Rebecca Dake, CFM, Floodplain & Insurance Training & Outreach, FEMA Region 6
- Deirdre Kinard-Green, CRS Administrative Coordinator, Floodplain Management Office, Houston Public Works

Poll 1 of 6:

What city are you from?



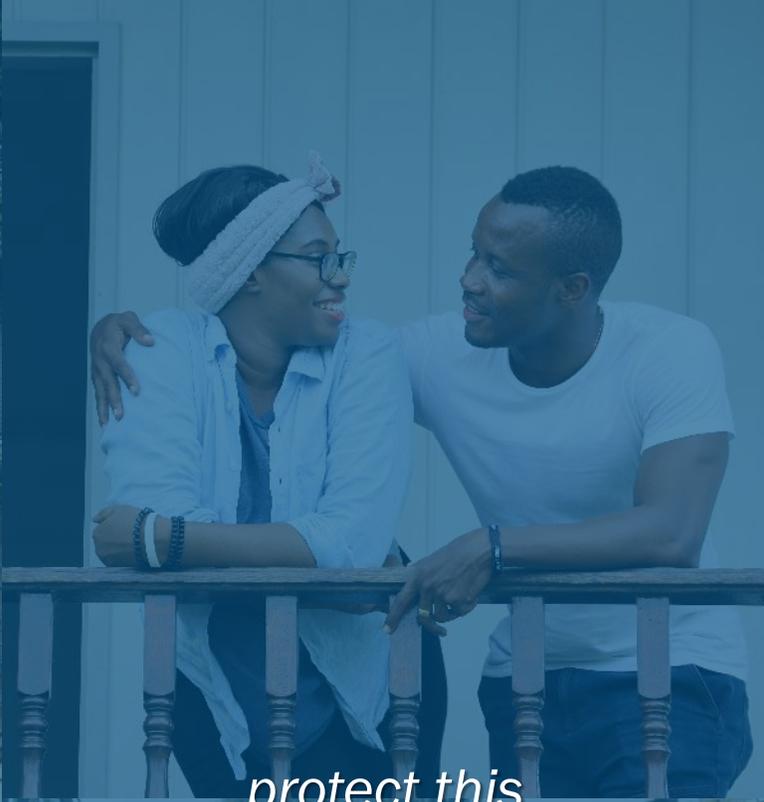
Training overview

- Learn why proper permitting is necessary
- Learn about uses for the Elevation Certificate (EC)
- Walk through the sections contained in the EC
- See common EC mistakes and how to avoid them
- View resources like the EC checklist
- Take your questions and provide answers if we can





avoid this



protect this



Why is proper permitting and elevation data necessary?

- Helps protect people and property.
- Requirement of local flood ordinances, and shows compliance with local, state, and federal laws/executive orders.
- Condition for participation in the National Flood Insurance Program (NFIP).
- Helps avoid extremely high insurance premiums.
- Avoids issues for citizens selling the structure/land in the future.

EC purpose

- ✓ Records information used to determine compliance with building codes/local floodplain ordinances
- ✓ Tool for supporting [Letters of Map Change](#)
- ✓ Prerequisite for [Community Rating System](#) (CRS) participation
- ✗ No longer required on the NFIP insurance side to rate flood insurance for Post-FIRM buildings
- ✓ May be used for flood insurance rating in any flood zone

Flood zones requiring elevation data/EC



All Zones with V



All Zones with A

FEMA minimum floodplain standards are required in the Special Flood Hazard Area (SFHA), 1% annual chance (100-year) floodplain. All zones A and V, shown here in teal.



Zone X (shaded)

The City of Houston has a higher standard and regulates the 2% annual chance (500-year) floodplain, shown here in tan.

Where can you find flood maps and flood zones?

FEMA Flood Map Service Center:
Welcome!

Looking for a Flood Map? 

Enter an address, a place, or
longitude/latitude coordinates:

houston, texas

Search

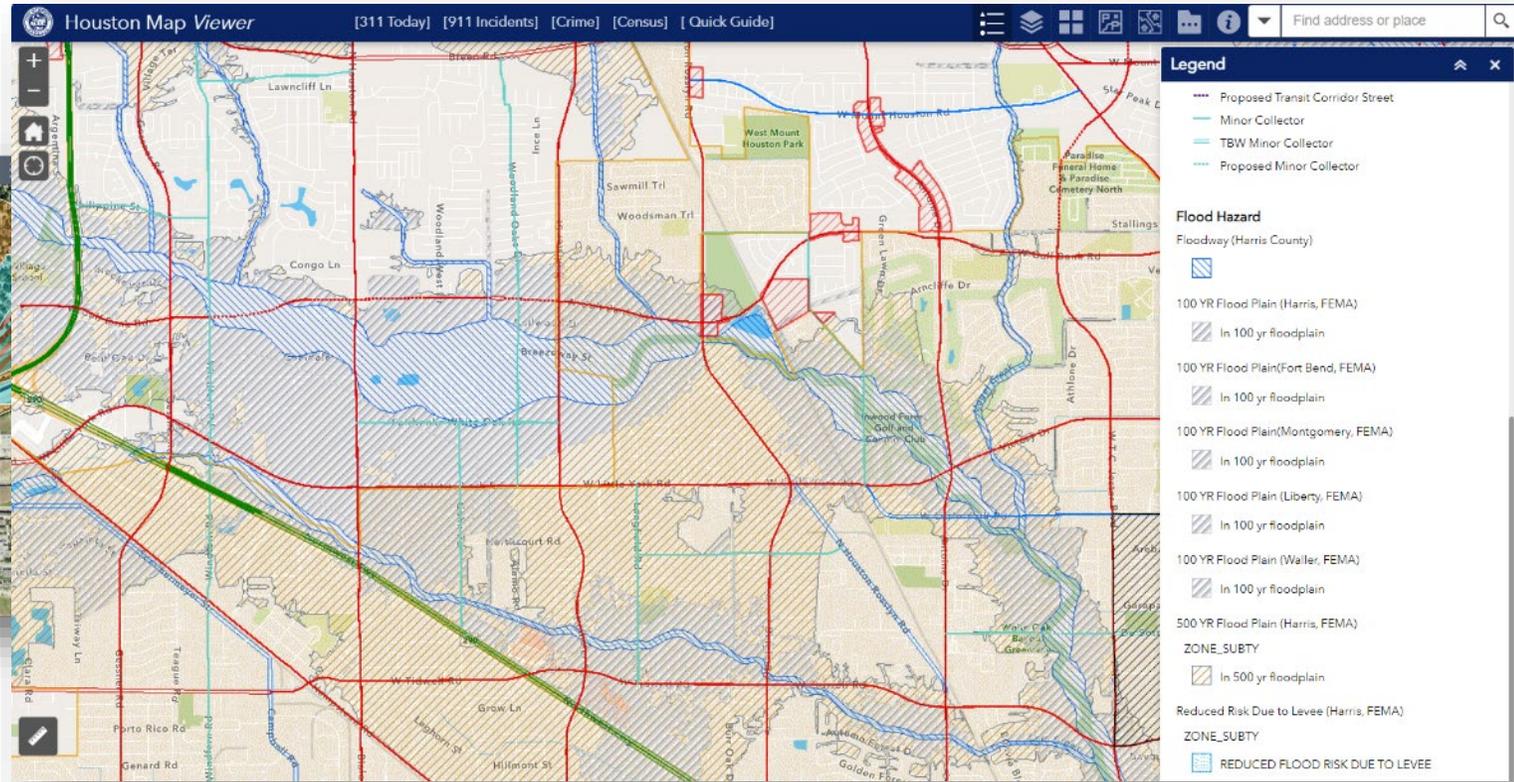


Looking for more than just a
current flood map?

Visit [Search All Products](#) to access the
community.



[FEMA National Flood Hazard
Layer Viewer](#)



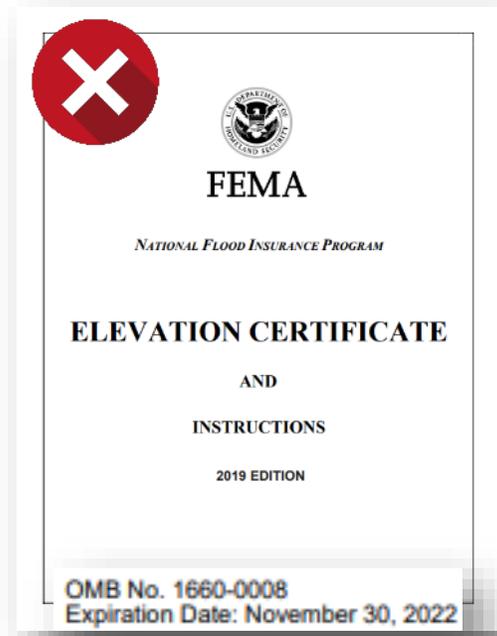
[Houston Map Viewer \(arcgis.com\)](#)



FEMA

Use 2023 form, expiring 2026

- Make sure to use the 2023 edition, expiring June 30, 2026
- [Elevation Certificate | FEMA.gov](https://www.fema.gov)



National Flood Insurance Program

Elevation Certificate

and Instructions

2023 EDITION



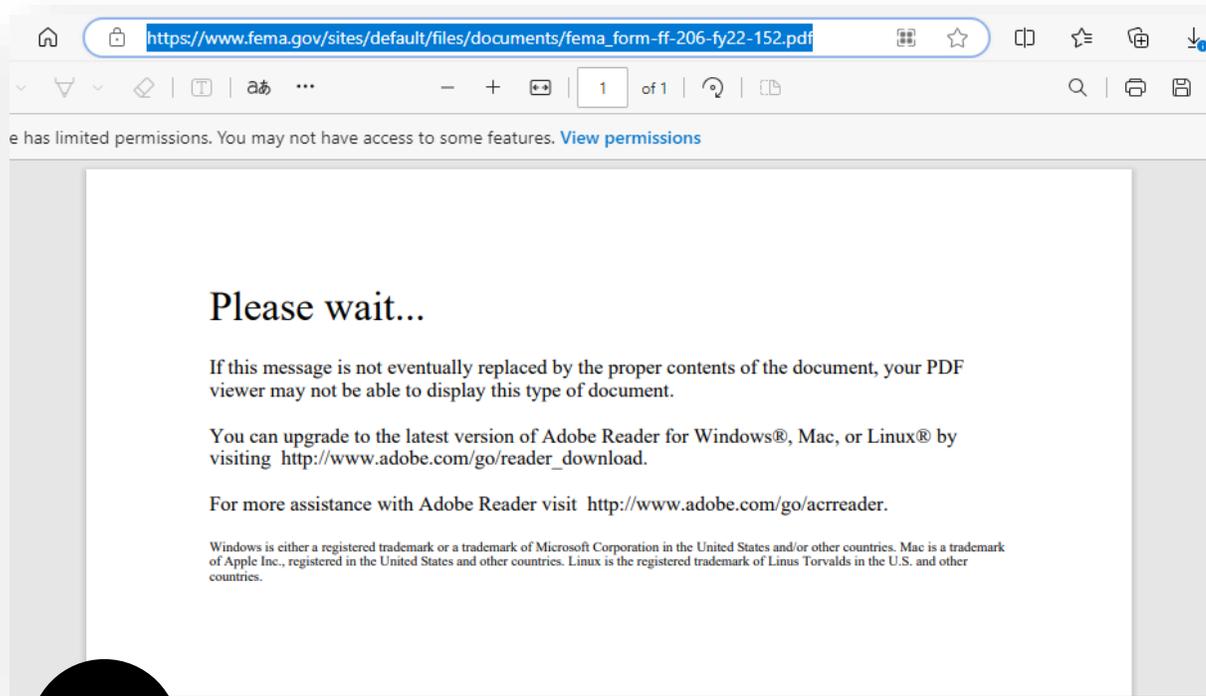
FEMA

OMB Control No. 1660-0008
Expiration Date: 06/30/2026

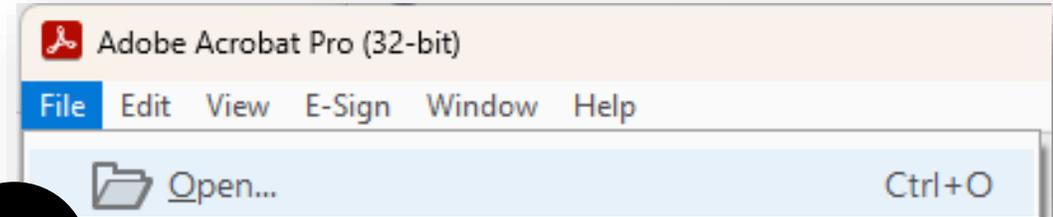


FEMA

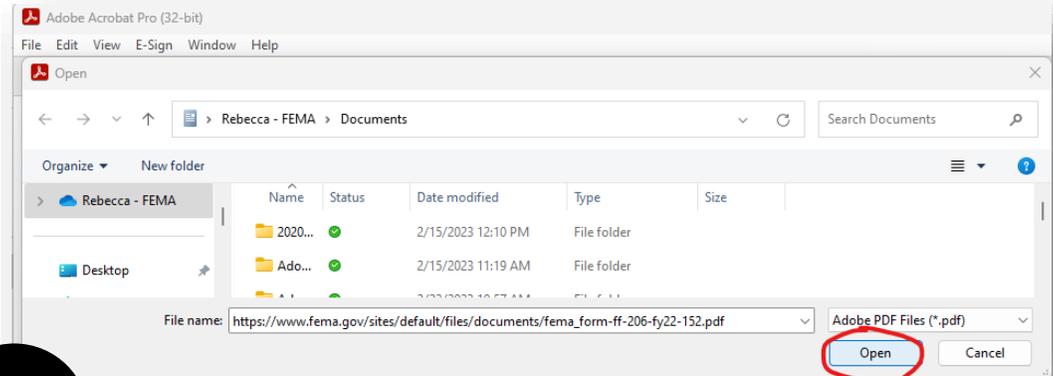
Opening the EC



1 Copy the EC URL.

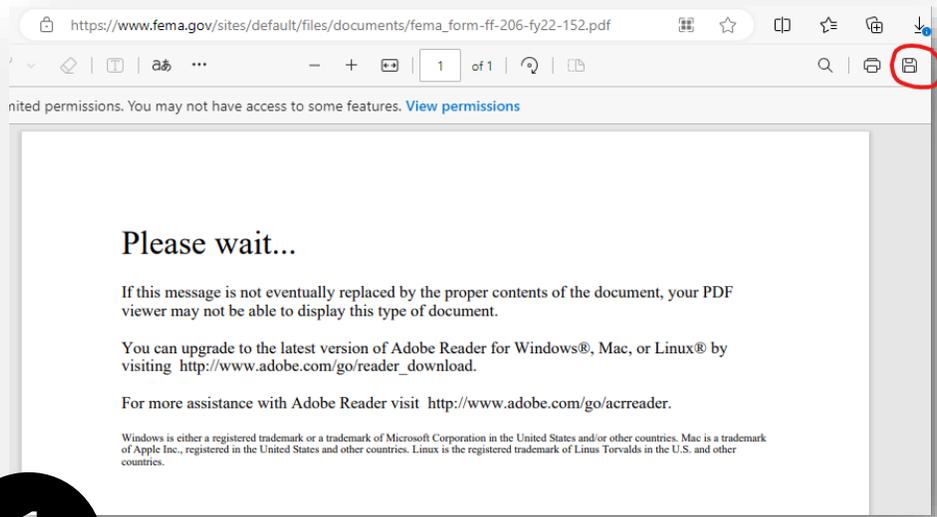


2 In your PDF viewer, click File, Open.

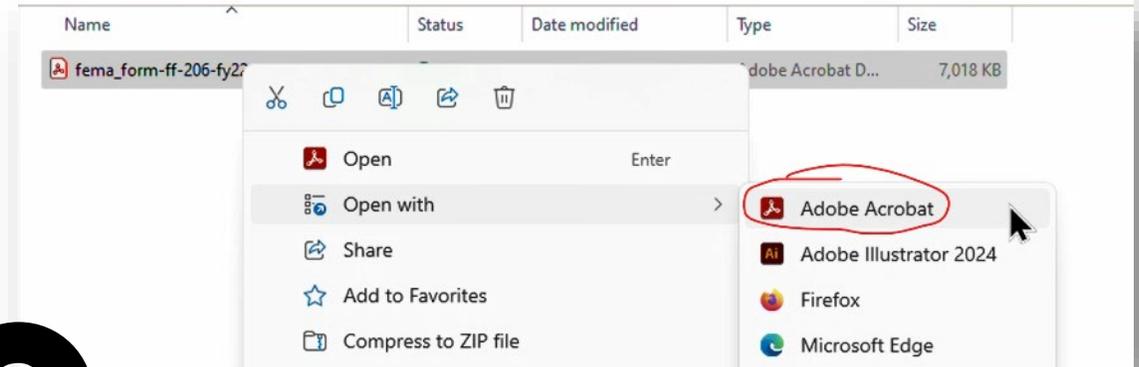
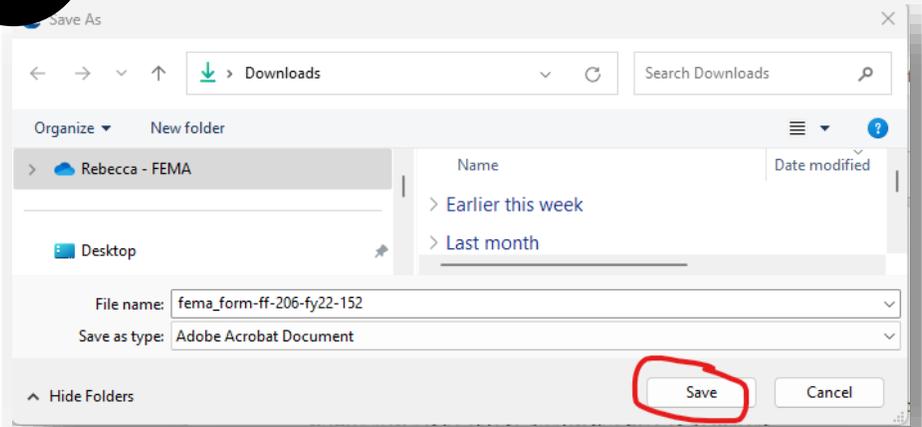


3 Paste the URL into the bar and click Open.

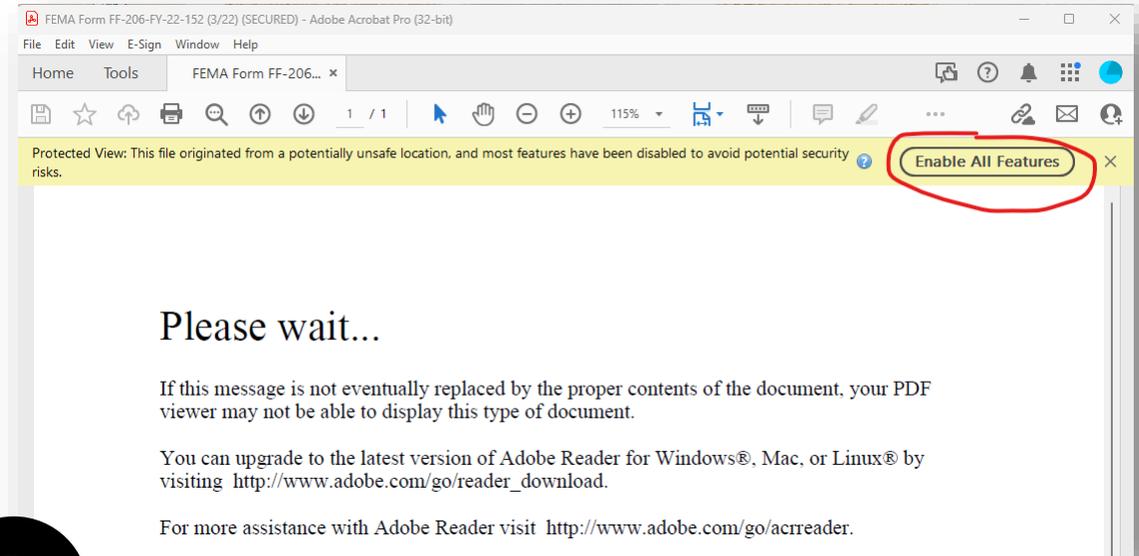
Opening the EC, alternative method



1 Save or download the EC as a PDF.



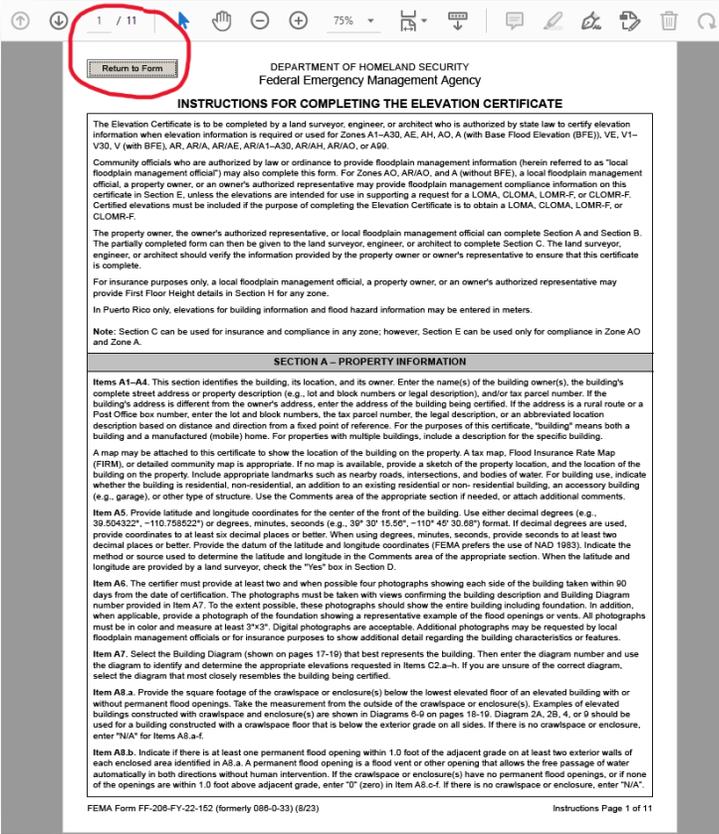
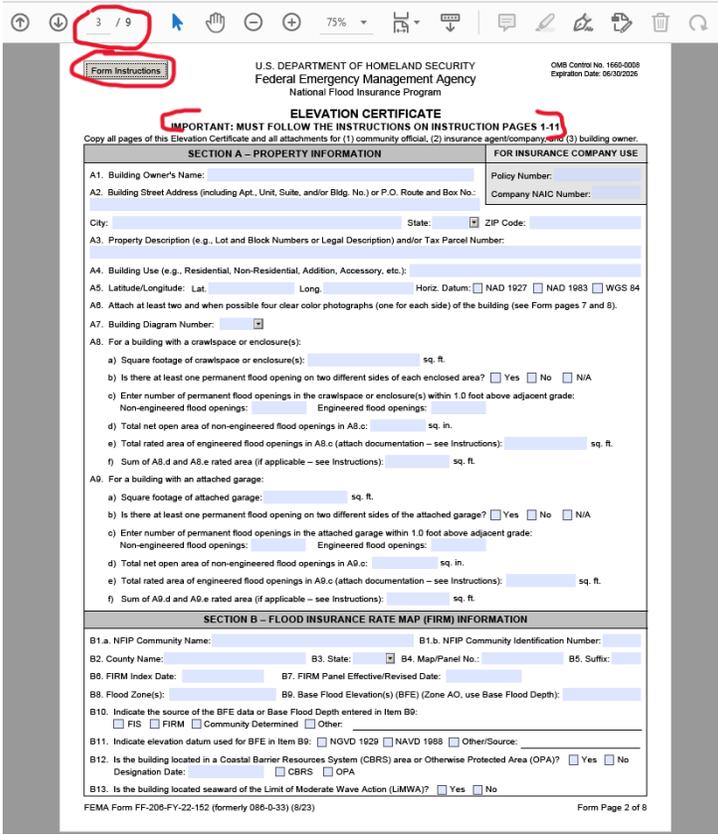
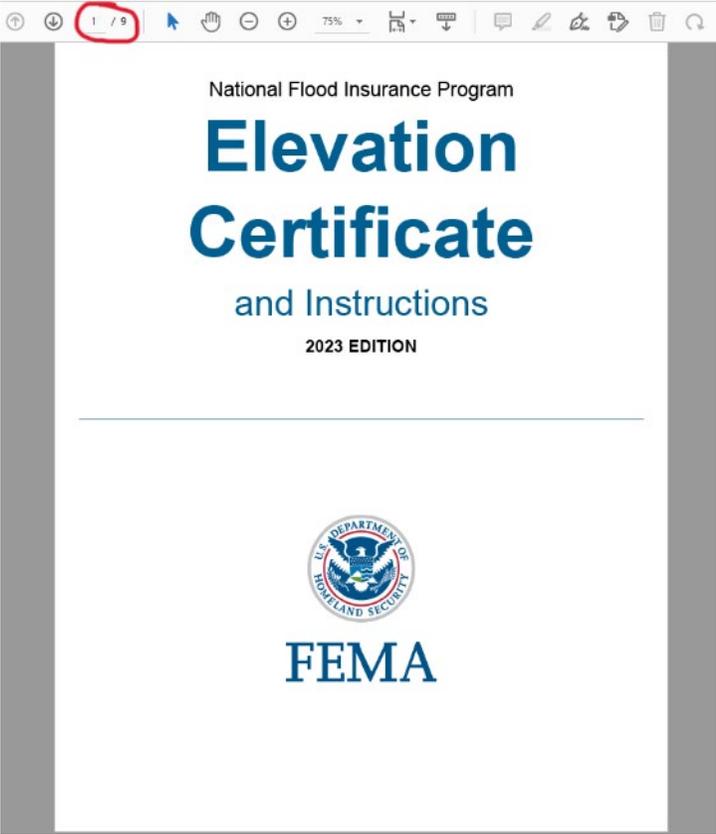
2 Right click on the saved PDF and Open With a PDF reader.



3 Click Enable All Features.



Find instructions by clicking the Form Instructions button



The EC document is nine pages, with 1 cover page, 1 notice page, and 7 fillable form pages. When you click on Form Instructions, you get eleven additional pages of direction.



Poll 2 of 6

Have you read the 2023 FEMA EC Instructions?



FEMA

Sections of the EC and who can complete

- Anyone
 - Anyone
 - Licensed Pro
 - Licensed Pro
 - Anyone
 - Anyone
 - Local Official
 - Anyone
 - Anyone
- Section A – Property Information
 - Section B – FIRM Information
 - Section C – Building Elevations (Survey needed)
 - Section D – Surveyor Certification (for Section C)
 - Section E – Building Measurements (Survey not needed)
 - Section F – Owner or Representative Certification (for Section E)
 - Section G – Community Information (Recommended)
 - New! Section H – First Floor Height (insurance only; survey not needed) *NEW SECTION*
 - New! Section I – Owner or Representative Certification (for Section H) *NEW SECTION*

Section A: Property information

Who can fill out this form?

- Land surveyor, engineer, or architect;
- Community officials; zones AE, A 1-30 or VE, V 1-30 (with BFE);
- Other reasons a community official, a property owner, or an owner's representative
 - (Agent)

Form Instructions		U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency National Flood Insurance Program		OMB Control No. 1650-0008 Expiration Date: 06/30/2026	
ELEVATION CERTIFICATE					
IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11					
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: <input type="text"/>				Policy Number: <input type="text"/>	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: <input type="text"/>				Company NAIC Number: <input type="text"/>	
City: <input type="text"/>		State: <input type="text"/>		ZIP Code: <input type="text"/>	
A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Number: <input type="text"/>					
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): <input type="text"/>					
A5. Latitude/Longitude: Lat. <input type="text"/> Long. <input type="text"/> Horiz. Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983 <input type="checkbox"/> WGS 84					
A6. Attach at least two and when possible four clear color photographs (one for each side) of the building (see Form pages 7 and 8).					
A7. Building Diagram Number: <input type="text"/>					

A6 Building photographs

More photographs capture additional building details and are now required regardless of the intended use of the EC form.

Requirements:

1. At least 2 for all uses, 4 when possible, showing each side of the building taken within 90 days from the date of certification.
2. In color and measure at least 3X3 inches.
3. May be digital format.
4. Show the entire building including foundation, and one of the foundation showing example of the flood openings or vents.

The image shows two FEMA Elevation Certificate forms. The top form is the main certificate, and the bottom one is a continuation page. Both forms include fields for address, insurance information, and instructions for photograph placement.

Form 1 (Top):

- Form Instructions**
- ELEVATION CERTIFICATE**
- IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11**
- BUILDING PHOTOGRAPHS**
- See Instructions for Item A6.
- Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:
- FOR INSURANCE COMPANY USE
- City: _____ State: _____ ZIP Code: _____
- Policy Number: _____
- Company NAIC Number: _____
- Instructions: Insert below at least two and when possible four photographs showing each side of the building (for example, may only be able to take front and back pictures of townhouses/rowhouses). Identify all photographs with the date taken and "Front View," "Rear View," "Right Side View," or "Left Side View." Photographs must show the foundation. When flood openings are present, include at least one close-up photograph of representative flood openings or vents, as indicated in Sections A8 and A9.
- Photo One
- Photo One Caption: _____
- Photo Two
- Photo Two Caption: _____

Form 2 (Bottom):

- Form Instructions**
- ELEVATION CERTIFICATE**
- IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11**
- BUILDING PHOTOGRAPHS**
- Continuation Page
- Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:
- FOR INSURANCE COMPANY USE
- City: _____ State: _____ ZIP Code: _____
- Policy Number: _____
- Company NAIC Number: _____
- Insert the third and fourth photographs below. Identify all photographs with the date taken and "Front View," "Rear View," "Right Side View," or "Left Side View." When flood openings are present, include at least one close-up photograph of representative flood openings or vents, as indicated in Sections A8 and A9.
- Photo Three
- Photo Three Caption: _____
- Photo Four
- Photo Four Caption: _____

FEMA Form FF-208-FY-22-152 (formerly 088-D-33) (8/23) Form Page 8 of 8



Building diagram number (A.7)



Slab-on-Grade Buildings
Diagrams 1A, 1B and 3

A7. Building Diagram Number



Basement Buildings
Diagrams 2A, 2B and 4



**Buildings with
Elevated Foundations**
Diagrams 5-9



Building diagrams: Clarification on Diagrams 7 & 8

DIAGRAM 7:

All buildings elevated on full-story foundation walls with a partially or fully enclosed area below the elevated floor. This includes walkout levels, where at least one side is at or above grade. The principal use of this building is located in the elevated floors of the building.

Distinguishing Feature – For all zones, the area below the elevated floor is enclosed, either partially or fully. In A Zones, the partially or fully enclosed area below the elevated floor is with or without openings** present in the walls of the enclosure. Indicate information about enclosure size and openings in Section A - Property Information.

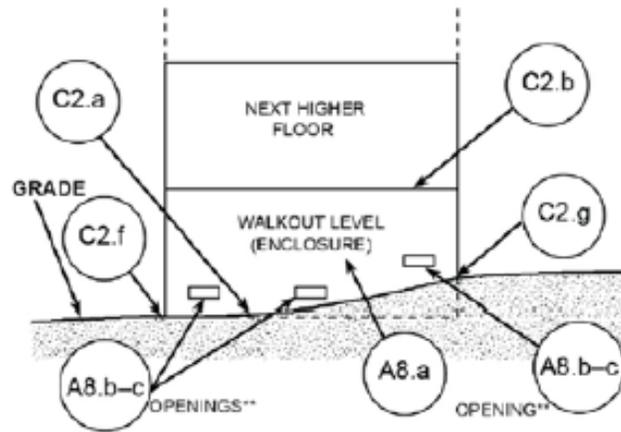
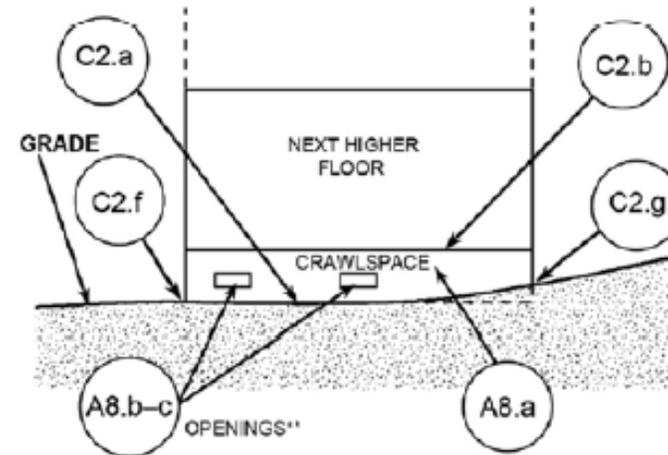


DIAGRAM 8:

All buildings elevated on a crawlspace with the floor of the crawlspace at or above grade on at least one side, with or without an attached garage.

Distinguishing Feature – For all zones, the area below the first floor is enclosed by solid or partial perimeter walls. In all A zones, the 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. (If the distance from the crawlspace floor to the top of the next higher floor is more than 5 feet, use Diagram 7.)



Section A: Property information, continued

This is where we collect information about any enclosed area below the elevated floor. 1 sq ft enclosed = 1 sq in vent – also indicate if vents are engineered openings.

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

- a) Square footage of crawlspace or enclosure(s): sq. ft.
- b) Is there at least one permanent flood opening on two different sides of each enclosed area? Yes No N/A
- c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade:
Non-engineered flood openings: Engineered flood openings:
- d) Total net open area of non-engineered flood openings in A8.c: sq. in.
- e) Total rated area of engineered flood openings in A8.c (attach documentation – see Instructions): sq. ft.
- f) Sum of A8.d and A8.e rated area (if applicable – see Instructions): sq. ft.

A9. For a building with an attached garage:

- a) Square footage of attached garage: sq. ft.
- b) Is there at least one permanent flood opening on two different sides of the attached garage? Yes No N/A
- c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade:
Non-engineered flood openings: Engineered flood openings:
- d) Total net open area of non-engineered flood openings in A9.c: sq. in.
- e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instructions): sq. ft.
- f) Sum of A9.d and A9.e rated area (if applicable – see Instructions): sq. ft.



A9: What is and is not an attached garage?

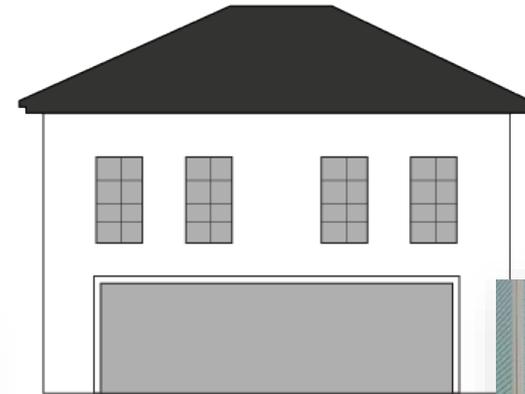
Attached Garage

- Common wall, Single structure
- Nothing above the garage



Not an Attached Garage

- Parking on the bottom floor
- Enclosure underneath an elevated building



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If engineered flood openings are used...

- Certification needed
 - Individual Engineered Flood Openings Certification, or an Evaluation Report issued by the International Code Council Evaluation Service (ICC-ES)
 - ICC-ES Evaluation Report includes design requirements, rated area, and certification specifications.
- Attach to Elevation Certificate



Poll 3 of 6

How common is it to see the BFE for Zones AE as a whole number, with no decimal place?

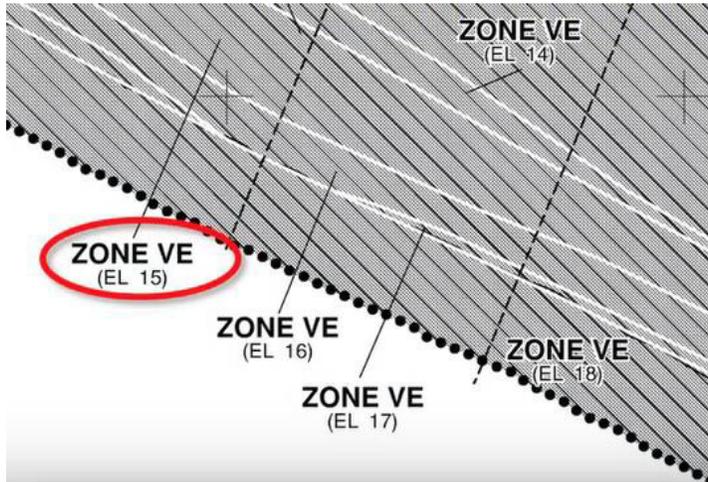


FEMA

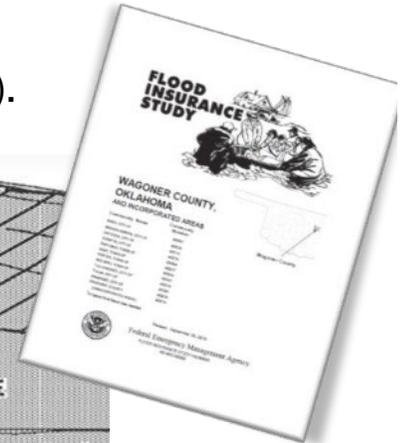
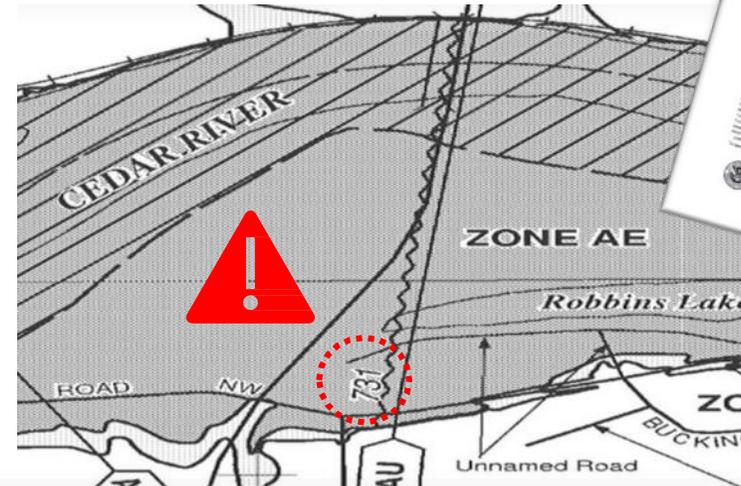
Note: BFE, box B9, and box B10 on Elevation Certificates

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

You can pull static BFEs from FIRM.



Don't be fooled. You must use the Flood Insurance Study (FIS) to determine BFE in areas with detailed studies, including many rivers, streams and lakes (AE, AH Zones).



B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9:

FIS FIRM Community Determined Other: _____

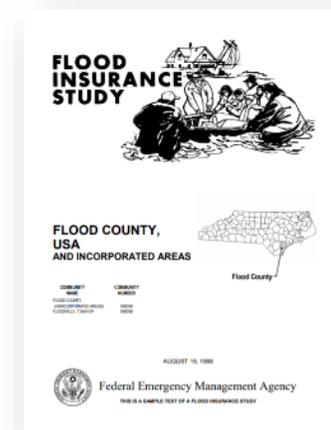


FEMA

Zone AE BFE



- Do not use the BFEs shown here on the FIRM.
- Measure the distance from the nearest cross-section, along the thalweg, to the upstream corner of the structure.
- Then, go to the Flood Insurance Study (FIS) and find the Flood Profile for this flooding source.



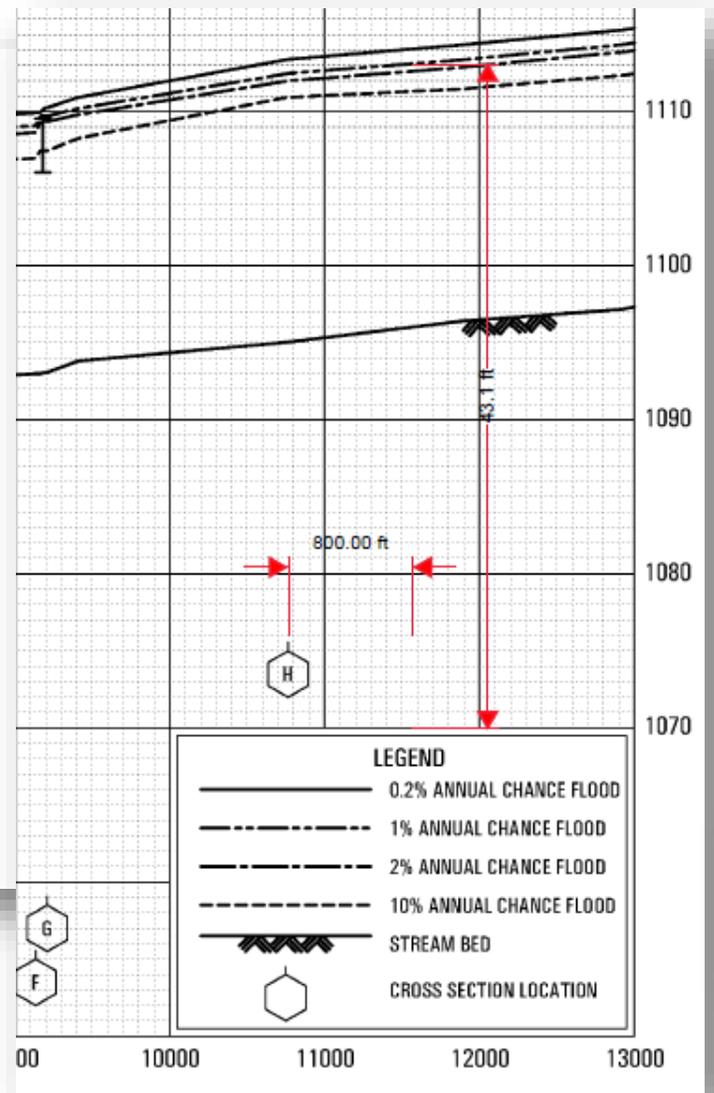
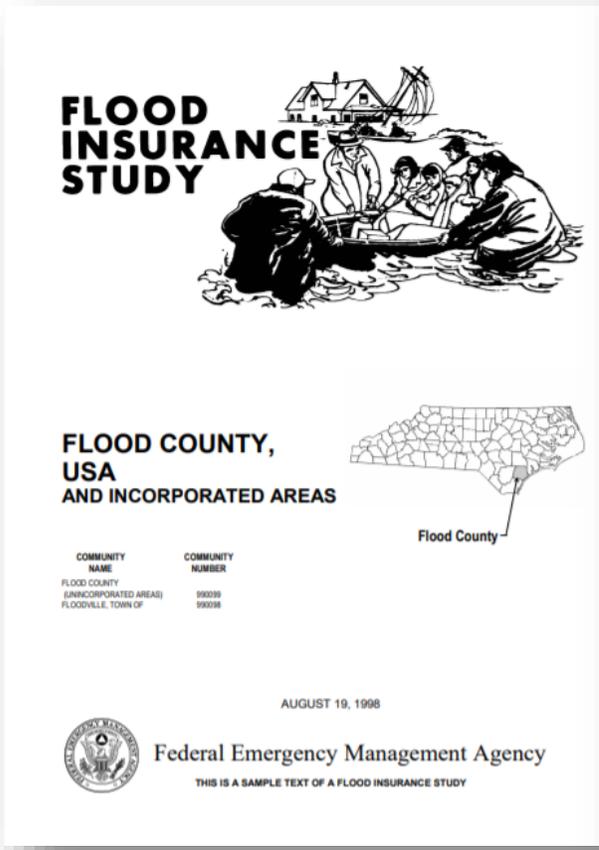
For in-depth training, take these on-demand courses:

- [NFIP 101](#), Unit 3
- [How to Read a FIRM](#)
- [How to Use a FIS](#)



FEMA

Using a Flood Insurance Study (FIS)



- At the Flood Profile for the flooding source, in the FIS, measure the same distance from the cross section.
- Use the 1% annual chance flood line, shown in the legend to determine the BFE. 1113.1 shown here.
- B10 in the EC should be marked FIS and your BFE will rarely be a whole number.

B8. Flood Zone(s): **AE** B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth): **1113.1**

B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9:
 FIS FIRM Community Determined Other: _____



City of Houston Example: Section B for Zone A Structure

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1.a. NFIP Community Name: City of Houston B1.b. NFIP Community Identification Number: 480296

B2. County Name: Harris B3. State: TX B4. Map/Panel No.: 48201C0660 B5. Suffix: M

B6. FIRM Index Date: 11/15/2019 B7. FIRM Panel Effective/Revised Date: 06/09/2014

B8. Flood Zone(s): A B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth): N/A

B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9:

FIS FIRM Community Determined Other: N/A

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

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

B13. Is the building located seaward of the Limit of Moderate Wave Action (LiMWA)? Yes No

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

Comments (including source of conversion factor in C2; type of equipment and location per C2.e; and description of any attachments):

In other areas around the state, where you are able to use FEMA's [Estimated Base Flood Elevation Viewer](#):

- B9: indicate BFE to tenth decimal
- B10: Mark Other, and put FEMA Base Level Engineering, (Date of Study)
- B11: Indicate the datum for B9

- B9: N/A
- B10: Community Determined or Other
- B11: N/A
- Section D Comments will need to be filled out



City of Houston Example: Section B for Zone AE Structure

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION			
B1.a. NFIP Community Name: <u>CITY OF HOUSTON</u>	B1.b. NFIP Community Identification Number: <u>480296</u>		
B2. County Name: <u>HARRIS</u>	B3. State: <u>TX</u>	B4. Map/Panel No.: <u>48201 C 0485</u>	B5. Suffix: <u>M</u>
B6. FIRM Index Date: <u>11/15/2019</u>	B7. FIRM Panel Effective/Revised Date: <u>06/09/2014</u>		
B8. Flood Zone(s): <u>AE</u>	B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth): <u>75.80'</u>		
B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9: <input checked="" type="checkbox"/> FIS <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other: _____			
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input checked="" type="checkbox"/> Other/Source: <u>NAVD88,2001 ADJ.</u>			
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			
B13. Is the building located seaward of the Limit of Moderate Wave Action (LIMWA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION			
Comments (including source of conversion factor in C2; type of equipment and location per C2.e; and description of any attachments): <u>500 YEAR FLOOD PROTECTION ELEVATION FOR THIS SITE IS 76.8' PER FIS PROFILE - THE MINIMUM FINISH FLOOR ELEVATION IS 76.8' + 2.00' =78.80'- C2(e) -TOP OF PLATFORM FOR A/C UNIT(X2)-ELEV.=78.87'- BOTTOM OF ELEC. METER (X2)= ELEV.=79.08'-BOTH @ REAR OF HOUSE.</u>			

B9: Comes from reading the Flood Insurance Study (FIS)



City of Houston Example: Section B for Zone X (Shaded)

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION	
B1.a. NFIP Community Name: <u>CITY OF HOUSTON</u>	B1.b. NFIP Community Identification Number: <u>480296</u>
B2. County Name: <u>HARRIS</u>	B3. State: <u>TEXAS</u> B4. Map/Panel No.: <u>48201C1005</u> B5. Suffix: <u>M</u>
B6. FIRM Index Date: <u>11-15-2019</u>	B7. FIRM Panel Effective/Revised Date: <u>05-02-2019</u>
B8. Flood Zone(s): <u>X SHADED</u>	B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth): <u>50.10</u>
B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9: <input checked="" type="checkbox"/> FIS <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other: _____	
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input checked="" type="checkbox"/> Other/Source: <u>NAVD 88, 2001 ADJ.</u>	
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	
B13. Is the building located seaward of the Limit of Moderate Wave Action (LiMWA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION	
Comments (including source of conversion factor in C2; type of equipment and location per C2.e; and	
1. C2e IS AN A/C UNIT LOCATED AT THE RIGHT SIDE OF THE RESIDENCE.	
2. 500 YEAR WSE (DFE) = 52.8 (FIS PROFILE [REDACTED] LOMR [REDACTED] EFF DATE 10-21-19 CROSS SECTION [REDACTED])	
3. 15 NON-ENGINEERED FLOOD VENTS SIZE 16"X8" = 1920 SQ. IN.	

- B9: Look for the nearest SFHA BFE
- B10: Should be FIS or FIRM



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Section C: Building elevation information

Professional surveyor, architect, or engineer completes the EC and provides the measurements contained in Section C.

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 *A new Elevation Certificate will be required when construction of the building is complete.			
C2. Elevations – Zones A1–A30, AE, AH, AO, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, A99. Complete Items C2.a–h below according to the Building Diagram specified in Item A7. In Puerto Rico only, enter meters. Benchmark Utilized: <input type="text"/> Vertical Datum: <input type="text"/>			
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: _____			
Datum used for building elevations must be the same as that used for the BFE. Conversion factor used?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, describe the source of the conversion factor in the Section D Comments area.			
a) Top of bottom floor (including basement, crawlspace, or enclosure floor):	<input type="text"/>	Check the measurement used: <input type="checkbox"/> feet <input type="checkbox"/> meters	
b) Top of the next higher floor (see Instructions):	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	
c) Bottom of the lowest horizontal structural member (see Instructions):	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	
d) Attached garage (top of slab):	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	
e) Lowest elevation of Machinery and Equipment (M&E) servicing the building (describe type of M&E and location in Section D Comments area):	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	
f) Lowest Adjacent Grade (LAG) next to building: <input type="checkbox"/> Natural <input type="checkbox"/> Finished	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	
g) Highest Adjacent Grade (HAG) next to building: <input type="checkbox"/> Natural <input type="checkbox"/> Finished	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	
h) Finished LAG at lowest elevation of attached deck or stairs, including structural support:	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	



Section C: HAG and LAG

Highest Adjacent
Grade (HAG)



Lowest Adjacent
Grade (LAG)



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C2a top of bottom floor

- **Additional detail** now in EC instructions...
 - Enter the elevation measured at the top of the bottom floor (excluding the attached garage) indicated by the selected Building Diagram.
- For buildings elevated on a crawlspace, enter the lowest elevation on the top of the crawlspace floor in Item C2.a.
 - Regardless of whether the crawlspace has permanent flood openings.



C2b next higher floor

- **Additional detail** now in EC instructions...
- For Building Diagrams 2A through 9 in any flood zone, including Zones B, C, X, and D, enter the elevation measured at the top of the next higher floor (excluding the attached garage)
- For buildings requiring more than two floors or levels to be surveyed, such as those with multiple floors or multi-level enclosures, enter the additional surveyed elevations and floor descriptions in the Section D Comments; clarify which floors are entered as Item C2.a and C2.b.



C2c bottom of lowest horizontal structural member

- Required in V zones
 - EC form says “See Instructions” (“Only V Zones” was removed)
 - Why? Coastal A Zones
- For Building Diagrams 5 and 6 and in regulated areas subject to coastal flooding



Three different meanings of “floor”

Bottom Floor Elevation

- Measured by the surveyor
- The floor with the lowest elevation
 - May be at, above, or below grade
- C2.a or E1 on the EC

Lowest Floor Elevation

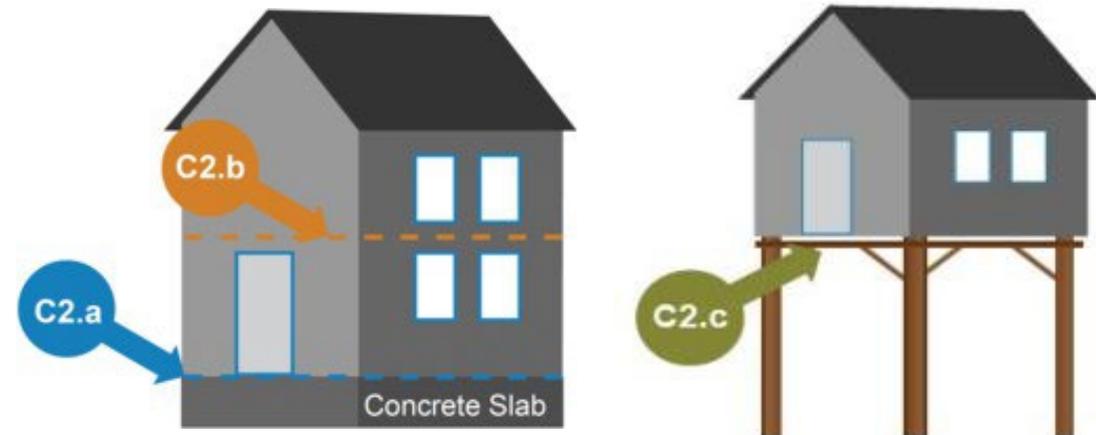
- Not determined by the surveyor
- Interpreted by the community floodplain administrator in G9a
- Based on multiple factors
- Not used for rating insurance
- Determines whether structure is compliant with local floodplain ordinance: “Is Lowest Floor above BFE (plus freeboard)?”

First Floor Height

- Used for rating insurance
- At or above-grade only
- Varies by foundation type and building diagram
- Recorded in Section H, or interpreted from Section C or E

Section C: Building elevation vocabulary

- Lowest Floor Elevation (LFE). Recall that FEMA defines the lowest floor as 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. **C2.a** shows the top of the bottom floor.
- If you go one floor up, you'll reach the top of the next higher floor, or **C2.b**.
- If the building 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.



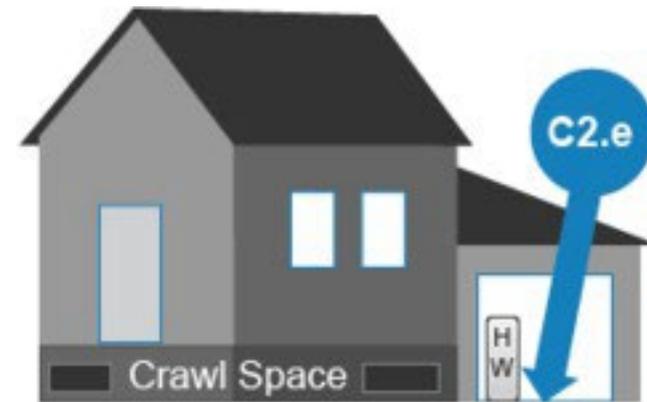
Section C: Building elevation vocabulary, continued

Attached Garages

- Is there an attached garage that is beside the building (not underneath or detached)? You'll find that measurement in C2.d.



Where is the primary electrical equipment, air conditioner, water heater, or other machinery? Find the lowest elevation of machinery or equipment servicing the building measurement in C2.e. You can locate more detail about equipment in Comments portion of Section D at the top of page 2 of the EC.



Section C updated instructions

- Supporting a request for a LOMA, CLOMA, LOMR-F, or CLOMR-F? Complete Section C!
- Note: Section C may also be completed for insurance purposes, to determine the building's First Floor Height in any flood zone (including Zones B, C, X and D).
- Additional instructions on procedures to follow if access to the crawlspace is limited or cannot be gained.
- Note: If any item does not apply to the building, enter “N/A” for not applicable.
- Use the Comments area of Section D

Poll 4 of 6

Which term is used for insurance rating?



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Section D: Surveyor, engineer or architect certification

This section is ONLY for Surveyor, Engineer or Architects!

Email address field added

- The certification box must include the certifier's seal if Section C was completed by a surveyor or engineer
- Additional instructions now provide clarity/examples for using Comments area of Section D to provide relevant and clarifying information not specified elsewhere on the EC.

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION	
This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by state law to certify elevation information. <i>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.</i>	
Were latitude and longitude in Section A provided by a licensed land surveyor? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Check here if attachments and describe in the Comments area.	
Certifier's Name: <input type="text"/>	License Number: <input type="text"/>
Title: <input type="text"/>	
Company Name: <input type="text"/>	
Address: <input type="text"/>	
City: <input type="text"/>	State: <input type="text"/> ZIP Code: <input type="text"/>
Telephone: <input type="text"/>	Ext.: <input type="text"/> Email: <input type="text"/>
Signature: <input type="text"/>	Date: <input type="text"/>
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 source of conversion factor in C2; type of equipment and location per C2.e; and description of any attachments): <input type="text"/>	

FEMA Form FF-208-FY-22-152 (formerly 086-0-33) (8/23) Form Page 3 of 8

City of Houston's EC Checklist

<https://www.houstonpermittingcenter.org/office-city-engineer/floodplain-management-office#agency-links-1296>

Section E: Building elevation information

This section can be completed by anyone who can read a tape measure – literally. You need an understanding of the terms Highest adjacent grade (HAG) and lowest adjacent grade (LAG).

Supporting a LOMC Request? Use Section C instead of Section E. Measurements based on Natural grade.

SECTION E – BUILDING MEASUREMENT INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO, ZONE AR/AO, AND ZONE A (WITHOUT BFE)			
For Zones AO, AR/AO, and A (without BFE), complete Items E1–E5. For Items E1–E4, use natural grade, if available. If the Certificate is intended to support a Letter of Map Change request, complete Sections A, B, and C. Check the measurement used. In Puerto Rico only, enter meters.			
Building measurements are based on: <input type="checkbox"/> Construction Drawings* <input type="checkbox"/> Building Under Construction* <input type="checkbox"/> Finished Construction			
*A new Elevation Certificate will be required when construction of the building is complete.			
E1. Provide measurements (C.2.a in applicable Building Diagram) for the following and check the appropriate boxes to show whether the measurement is above or below the natural HAG and the LAG.			
a) Top of bottom floor (including basement, crawlspace, or enclosure) is:	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	<input type="checkbox"/> above or <input type="checkbox"/> below the HAG.
b) Top of bottom floor (including basement, crawlspace, or enclosure) is:	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	<input type="checkbox"/> above or <input type="checkbox"/> below the LAG.
E2. For Building Diagrams 8–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 1–2 of Instructions), the next higher floor (C2.b in applicable Building Diagram) of the building is:	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	<input type="checkbox"/> above or <input type="checkbox"/> below the HAG.
E3. Attached garage (top of slab) is:	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	<input type="checkbox"/> above or <input type="checkbox"/> below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is:	<input type="text"/>	<input type="checkbox"/> feet <input type="checkbox"/> meters	<input type="checkbox"/> above or <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown The local official must certify this information in Section G.			



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Section F: Property Owner Certification

This is for the Property Owner to certify this information is true and correct “to the best of my knowledge” – FPAs may want to take a look at the building themselves if this is presented to her/him.

SECTION F – PROPERTY OWNER (OR OWNER'S AUTHORIZED REPRESENTATIVE) CERTIFICATION		
The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without BFE) or Zone AO must sign here. <i>The statements in Sections A, B, and E are correct to the best of my knowledge</i>		
<input type="checkbox"/> Check here if attachments and describe in the Comments area.		
Property Owner or Owner's Authorized Representative Name: <input type="text"/>		
Address: <input type="text"/>		
City: <input type="text"/>	State: <input type="text"/>	ZIP Code: <input type="text"/>
Telephone: <input type="text"/>	Ext.: <input type="text"/>	Email: <input type="text"/>
Signature: <input type="text"/>	Date: <input type="text"/>	
Comments: <input type="text"/>		
SECTION F – PROPERTY OWNER (OR OWNER'S AUTHORIZED REPRESENTATIVE) CERTIFICATION		
Complete as indicated. This section is provided for certification of measurements when completing Sections A, B, and E. If Section E is completed by a property owner or property owner's authorized representative in Zone AO, AR/AO, or A (without BFE), then the community should confirm the heights in Section E to ensure compliance with community floodplain management ordinances. If Section E is completed by a local floodplain management official, then complete Item G2.a and Section G instead of Section F. <u>The address entered in this section must be the actual mailing address of the individual</u> who provided the information on the certificate. Check the box as indicated if including attachments and describe in the Comments area.		

FEMA Form FF-206-FY-22-152 (formerly 086-0-33) (8/23)

Form Page 4 of 8



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Section G: Community information

- Local officials can complete sections: A, B, C (or E) and G of this form, it may be a policy set by the community as to what can be done.
- Complete section G, if the property lies in Zone A flood zones.

SECTION G – COMMUNITY INFORMATION (RECOMMENDED FOR COMMUNITY OFFICIAL COMPLETION)

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

- 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 state law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)
- G2.a. A local official completed Section E for a building located in Zone A (without a BFE), Zone AO, or Zone AR/AO, or when item E5 is completed for a building located in Zone AO.
- G2.b. A local official completed Section H for insurance purposes.
- G3. In the Comments area of Section G, the local official describes specific corrections to the information in Sections A, B, E and H.
- G4. The following information (Items G5–G11) is provided for community floodplain management purposes.
- G5. Permit Number: G6. Date Permit Issued:
- G7. Date Certificate of Compliance/Occupancy Issued:
- G8. This permit has been issued for: New Construction Substantial Improvement
- G9.a. Elevation of as-built lowest floor (including basement) of the building: feet meters Datum:
- G9.b. Elevation of bottom of as-built lowest horizontal structural member: feet meters Datum:
- G10.a. BFE (or depth in Zone AO) of flooding at the building site: feet meters Datum:
- G10.b. Community's minimum elevation (or depth in Zone AO) requirement for the lowest floor or lowest horizontal structural member: feet meters Datum:
- G11. Variance issued? Yes No If yes, attach documentation and describe in the Comments area.

The local official who provides information in Section G must sign here. *I have completed the information in Section G and certify that it is correct to the best of my knowledge. If applicable, I have also provided specific corrections in the Comments area of this section.*

Local Official's Name: Title:

NFIP Community Name:

Telephone: Ext.: Email:

Address:

City: State: ZIP Code:

Signature: Date:

Comments (including type of equipment and location, per C2.e; description of any attachments; and corrections to specific information in Sections A, B, D, E, or H):



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Section H, First Floor Height Information for All Zones

For insurance purposes only

- Can be completed by anyone
- Professional survey not required
- Can be used for all flood zones
- First Floor Height above LAG (existing)
- By Foundation Type / Building Diagram

Also complete Sections A and B, and Section I

- Local FPA who completes Section H certifies in Section G instead.

If Section C and/or E are also completed, C prevails over H for insurance & compliance purposes.

**SECTION H – BUILDING'S FIRST FLOOR HEIGHT INFORMATION FOR ALL ZONES
(SURVEY NOT REQUIRED) (FOR INSURANCE PURPOSES ONLY)**

The property owner, owner's authorized representative, or local floodplain management official may complete Section H for all flood zones to determine the building's first floor height for insurance purposes. Sections A, B, and I must also be completed. Enter heights to the nearest tenth of a foot (nearest tenth of a meter in Puerto Rico). *Reference the Foundation Type Diagrams (at the end of Section H Instructions) and the appropriate Building Diagrams (at the end of Section I Instructions) to complete this section.*

H1. Provide the height of the top of the floor (as indicated in Foundation Type Diagrams) above the Lowest Adjacent Grade (LAG):

a) For Building Diagrams 1A, 1B, 3, and 5–8. Top of bottom feet meters above the LAG
floor (include above-grade floors only for buildings with
crawlspaces or enclosure floors) is:

b) For Building Diagrams 2A, 2B, 4, and 6–9. Top of next feet meters above the LAG
higher floor (i.e., the floor above basement, crawlspace, or
enclosure floor) is:

H2. Is all Machinery and Equipment servicing the building (as listed in Item H2 instructions) elevated to or above the floor indicated by the H2 arrow (shown in the Foundation Type Diagrams at end of Section H instructions) for the appropriate Building Diagram?
 Yes No



Photo: M. Gilbert

Section I

- Owner or Authorized Representative certifies the measurements in section H.
- If local floodplain management official completes Section H, they should certify in Section G instead of Section I.

SECTION I – PROPERTY OWNER (OR OWNER’S AUTHORIZED REPRESENTATIVE) CERTIFICATION

The property owner or owner’s authorized representative who completes Sections A, B, and H must sign here. *The statements in Sections A, B, and H are correct to the best of my knowledge. Note: If the local floodplain management official completed Section H, they should indicate in Item G2.b and sign Section G.*

Check here if attachments are provided (including required photos) and describe each attachment in the Comments area.

Property Owner or Owner’s Authorized Representative Name:

Address:

City: State: ZIP Code:

Telephone: Ext.: Email:

Signature: Date:

Comments:

Utilizing effective flood maps & best available data

- Consult the Effective, Preliminary and Pending products on the FEMA Map Service Center as well as other sources like base level engineering (BLE) data and state/community data.
- Helps communicate the most current flood risk data
- May be adopted by the community (for example, adopting Preliminary Maps)
 - Careful though: On the Elevation Certificate (EC) box B9., always use the effective BFE.
- To determine BFE in approximate Zones A and D (for example using BLE data—[the Estimated BFE Viewer](#))
 - Careful though: On the EC, box B10. check Other, and put FEMA Base Level Engineering, (Date of Study)

B8. Flood Zone(s): B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth):

B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9:

FIS FIRM Community Determined Other:

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



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Rejected!

- ECs will be sent back for correction when needed.
- Houston must maintain a very strict EC correctness percentage to maintain [Community Rating System | FEMA.gov](#) Class 5 standing.

CRS Credit Points, Classes and Premium Discounts

CRS Credit Points	CRS Class	CRS Discount (Premium Reduction)
4,500+	1	45%
4,000 - 4,499	2	40%
3,500 - 3,999	3	35%
3,000 - 3,499	4	30%
2,500 - 2,999	5	25%
2,000 - 2,499	6	20%
1,500 - 1,999	7	15%
1,000 - 1,499	8	10%
500 - 999	9	5%
0 - 499	10	0

Class: **5**
Community: **HOUSTON**
PIF: **105,925**
Premiums: **\$76,133,211**

Common EC mistakes

- Incorrect building diagram number
- Non-attached garages filled out incorrectly (A9a and C2d)
- Incorrect enclosure/venting information
- Lowest floor below BFE
- Incorrect community number
- Map/panel numbers
- Machinery and/or equipment not entered
- Expired FEMA EC form



Poll 5 of 6

Which part of the EC do you find the most challenging to fill out?



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Training and assistance from the Texas Water Development Board (TWDB)

[Community Resources | Texas Water Development Board](#)



Learn About Flooding

Flood Infrastructure Fund (FIF)

Flood Planning

Flood Financial Assistance Programs

National Flood Insurance Program (NFIP)

Flood Science

Flood Research

Floodplain Management Training

Community Resources

Flood Science and Community Assistance Staff

Flood Planning Staff

TxGIO



FEMA

Resources

- [FEMA YouTube Video on the New Elevation Certificate](#)
- [FEMA YouTube Video on the New Floodproofing Certificate](#)
- [National Flood Insurance Technical Bulletins | FEMA.gov](#)
- [Floodplain Management Office | Houston Permitting Center](#)

The screenshot shows the Houston Permitting Center website. On the left is a vertical navigation menu with the following items: CONTACT, CHAPTER 19, FLOOD DAMAGE REPAIR, BUILD RESPONSIBLY, PROPERTY PROTECTION, GUIDELINES AND FAQS, FLOOD HAZARDS, FLOOD SAFETY, FLOOD PROTECTION, FLOODPLAIN PRESERVATION, and MY HOME FLOODED. The 'CONTACT' item is highlighted in dark blue. The main content area is titled 'Elevation and Floodproofing Certificates'. It contains text explaining the National Flood Insurance Program (NFIP) Elevation Certificate and the NFIP Floodproofing Certificate. A list of resources is provided, including 'Elevation certificate and instructions', 'NFIP floodproofing certificate form', and '100-500 year Elevation Certificate Checklist'. The '100-500 year Elevation Certificate Checklist' link is enclosed in a red rectangular box, and a red arrow points from this box towards the right side of the image.

The form is titled 'City of Houston CRS EC Checklist ELEVATION CERTIFICATE'. It includes the following sections and fields:

- Header:** U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency National Flood Insurance Program. OMB Control No. 1660-0008 Expiration Date: 06/30/2026. (*) Must be completed. (**) Must check one box. Form pages 2-8 must be submitted with 3rd EC documents.
- Section A - PROPERTY INFORMATION:**
 - A1. Building Owner's Name: *
 - A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: * (A2 & A3 must match the building permit application and must be completed with city, state, and zip)
 - City: * State: * ZIP Code: *
 - A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Number: *
 - A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): Describe as accurately as possible
 - A5. Latitude/Longitude: Lat. * Long. * Horiz. Datum: NAD 1927 NAD 1983 WGS 84
 - A6. Attach at least two and when possible four clear color photographs (one for each side) of the building (see Form pages 7 and 8). (4 photos required. Photos must be in the back cover of this checklist)
 - A7. Building Diagram Number: Must be: 1A, 1B, 2A, 2B, 3, 4, 5, 6, 7, 8, 9 (See instructions to complete Section C)
 - A8. For a building with a crawlspace or enclosure(s): "Enter 'N/A' in fields that are not applicable."
 - a) Square footage of crawlspace or enclosure(s): _____ sq. ft.
 - b) Is there at least one permanent flood opening on two different sides of each enclosed area? Yes No N/A
 - c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade: _____ Non-engineered flood openings: _____ Engineered flood openings: _____
 - d) Total net open area of non-engineered flood openings in A8.c: _____ sq. in. Enter actual opening size
 - e) Total rated area of engineered flood openings in A8.c (attach documentation - see Instructions): Enter total rated area _____ sq. ft.
 - f) Sum of A8.d and A8.e rated area (if applicable - see Instructions): _____ sq. ft. Only required when both non-engineered and engineered openings are present
 - A9. For a building with an attached garage: Enter "N/A" in fields that are not applicable.
 - a) Square footage of attached garage: _____ sq. ft.
 - b) Is there at least one permanent flood opening on two different sides of the attached garage? Yes No N/A
 - c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade: _____ Non-engineered flood openings: _____ Engineered flood openings: _____
 - d) Total net open area of non-engineered flood openings in A9.c: _____ sq. in. Enter actual opening size
 - e) Total rated area of engineered flood openings in A9.c (attach documentation - see Instructions): Enter total rated area _____ sq. ft.
 - f) Sum of A9.d and A9.e rated area (if applicable - see Instructions): _____ sq. ft. Only required when both non-engineered and engineered openings are present
- Section B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION:**
 - B1.a. NFIP Community Name: City of Houston B1.b. NFIP Community Identification Number: 480296
 - B2. County Name: Must be entered and correct B3. State: TX B4. Map/Panel No.: * B5. Suffix: *
 - B6. FIRM Index Date: * B7. FIRM Panel Effective/Revised Date: *
 - B8. Flood Zone(s): * B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth): *
 - B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9: FIS FIRM Community Determined Other: **
 - 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 **
 - B13. Is the building located seaward of the Limit of Moderate Wave Action (LIMWA)? Yes No **

FEMA Form FF-206-FY-22-152 (formerly 086-0-33) (8/23) Form Page 2 of 8



Contacts

City of Houston, Public Works, Floodplain Management Office

- Address: 1002 Washington Ave., 3rd Floor, Houston, TX 77002
- Phone: 832-394-8854
- Email Address: fmo@houstontx.gov
- Hours of Operation: 8 am to 3 pm

David Lopez III, CFM

Assistant Chief Inspector

David.Lopez3@houstontx.gov

Brian Bartley, CFM

Floodplain Specialist

Brain.Bartley@fema.dhs.gov

Belle Gonzalez, CFM

Flood Outreach Specialist

Texas Water Development Board

Belle.Gonzalez@twdb.texas.gov

Poll 6 of 6:

Would you like a CFM CEC emailed to you?



FEMA