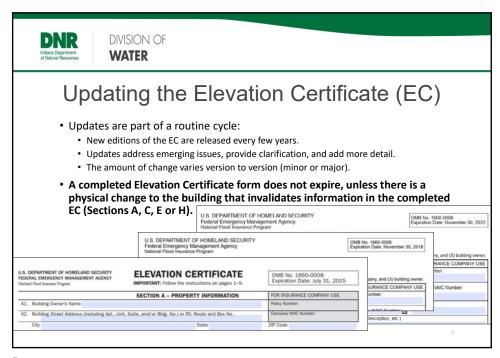


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Updating the Elevation Certificate (EC)

- Changes to the EC form in 2023 address several key issues.
 - Improves alignment with the NFIP flood insurance rating methodology
 - $\bullet\,$ Reduces the burden on property owners to obtain elevation information for insurance
 - Provides more clarity and detail to floodplain managers when regulating development
 - Provides more specificity for buildings with a combination of both engineered and nonengineered flood openings
 - Updates outdated phone numbers and web addresses

All new ECs on or after November 1, 2023, must use this version!

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DIVISION OF

WATER

NFIP Key Terms

- FIRM = Flood Insurance Rate Map
- FIS = Flood Insurance Study
- BFE = Base Flood Elevation
- SFHA = Special Flood Hazard Area (1% Annual Chance Flood)
- LAG = Lowest Adjacent Grade
- HAG = Highest Adjacent Grade
- Bottom Floor Elevation
- Lowest Floor Elevation
- First Floor Height*

7



DIVISION OF

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NFIP Flood Insurance Rating Methodology

Defining a Property's Unique Flood Risk

- The flood zone and Base Flood Elevation (BFE) are no longer used as direct rating variables.
- Elevations are considered for all properties, regardless of flood zone.



Rating Variables

- Geographic Location
- Structural Variables
- Prior Claims
- Discounts
 - Mitigation
 - Statutory

• CRS

8

^{*} indicates new or changed information



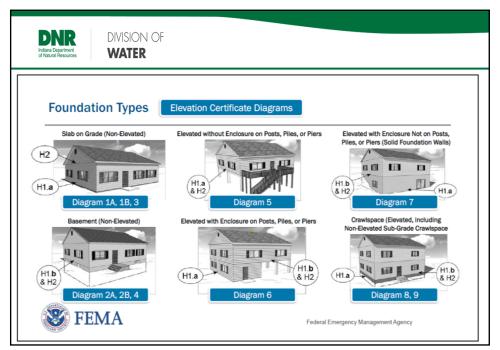
Structural Variables: Building Characteristics

- Building Occupancy
- Construction Type
 - For single-family homes: framed, masonry, other
- Foundation Type
- First Floor Height
- Lowest Adjacent Grade
- Building's Replacement Cost Value
 - Considers square footage (for singlefamily homes)
- Number of Floors in Building
 - Above ground floors only; not counting basements/enclosures
- Date of Construction

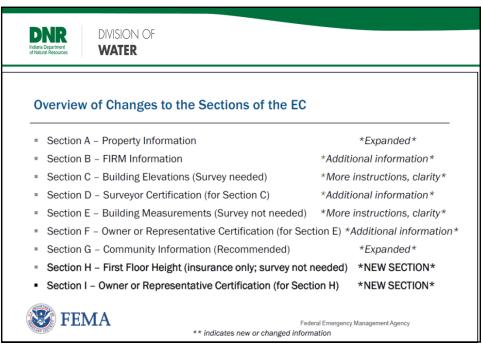


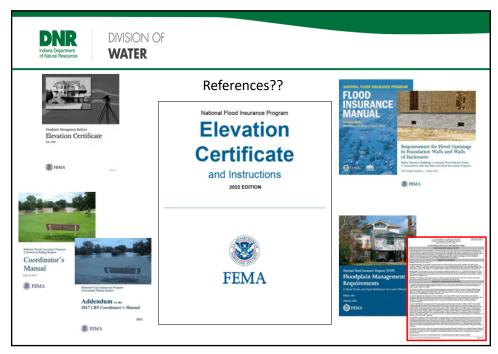
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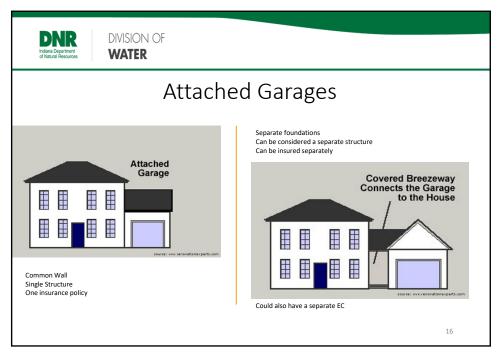


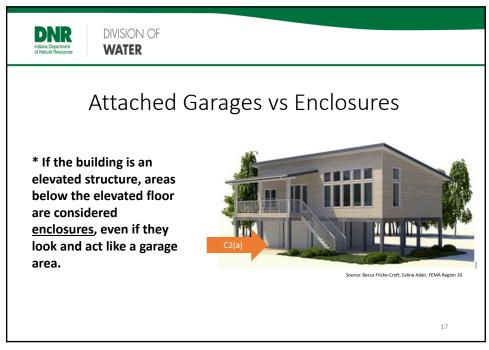




	VISION OF VATER
	Section A
A1. Building Owner's Name: A2. Building Street Address (in	Policy Number: Company NAIC Number:
City: A3. Property Description (e.g	State: ZIP Code: ,, Lot and Block Numbers or Legal Description) and/or Tax Parcel Number:
A4. Building Use (e.g., Resid A5. Latitude/Longitude: Lat.	lential, Non-Residential, Addition, Accessory, etc.): 6 decimals Long. 2 decimals if DMS Horizontal Datum: NAD 1927 NAD 1983 WGS 84
A6. Attach at least two and w	when possible four clear photographs (one for each side) of the building (see Form pages 7 and 8).

DIVISION OF WATER
Section A
A7. Building Diagram Number: A8. For a building with a crawlspace or enclosure(s): a) Square footage of crawlspace or enclosure(s): b) Is there at least one permanent flood opening on two different sides of each enclosed area? Yes No NEW 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 NEW
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: 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.





DIVISION OF WATER			
	Secti	on B	
B1.a. NFIP Community Name: County and	unincorporated area	B1.b. NFIP Community Identification	Number: 6 digits
B2. County Name:	B3. State:	■ B4. Map/Panel No.:	B5. Suffix:
B6. FIRM Index Date:	B7. FIRM Panel Effect	tive/Revised Date:	
B8. Flood Zone(s):	B9. Base Flood Eleva	tion(s) (BFE) (Zone AO, use Base Floo	od Depth):
B10 Indicate the source of the BFE data or E		d in Item B9:	
B11. Indicate elevation datum used for BFE in	n Item B9: NGVD 19	29 NAVD 1988 Other/Source:	
B12. Is the building located in a Coastal Barri Designation Date:	er Resources System (0	CBRS) area or Otherwise Protected Are	ea (OPA)? Yes No
B13. Is the building located seaward of the Li	mit of Moderate Wave A	ction (LiMWA)? 🔲 Yes 🔲 No 💙	NEW

DNR Indiana Department of Natural Resources WATER	
Section C	
C1. Building elevations are based on: Construction Drawings Duilding Under Construction* *A new Elevation Certificate will be required when construction of the building is complete.	Finished Construction
C2. Elevations – Zones A1–A30, AE, AH, AO, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AI A99. Complete Items C2.a–h below according to the Building Diagram specified in Item A7. In Puerto	
Benchmark Utilized: Vertical Datum:	
Indicate elevation datum used for the elevations in items a) through h) below. NGVD 1929 NAVD 1988 Other:	
Datum used for building elevations must be the same as that used for the BFE. Conversion factor used? If Yes, describe the source of the conversion factor in the Section D Comments area.	Yes No
a) Top of bottom floor (including basement, crawlspace, or enclosure floor):	feet meters
b) Top of the next higher floor (see Instructions):	feet meters
c) Bottom of the lowest horizontal structural member (see Instructions):	feet meters
d) Attached garage (top of slab):	feet 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): NEW	feet meters
f) Lowest Adjacent Grade (LAG) next to building: Natural Finished	feet meters
g) Highest Adjacent Grade (HAG) next to building: Natural Finished	feet meters
h) Finished LAG at lowest elevation of attached deck or stairs, including structural support:	feet meters

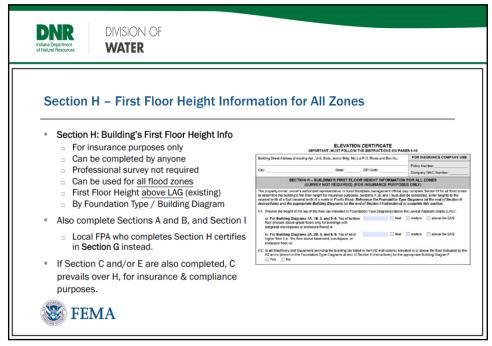
Section D This certification is to be signed and sealed by a land surveyor, engineer, or architect authorize information. I certify that the information on this Certificate represents my best efforts to interprefaise statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001. Were latitude and longitude in Section A provided by a licensed land surveyor? Yes Need the certifier's Name: License Number: Title: Company Name: Address: City: State: VIP Code:	et the data available. I understand that any
information. I certify that the information on this Certificate represents my best efforts to interpretaise statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001. Were latitude and longitude in Section A provided by a licensed land surveyor? Check here if attachments and describe in the Comments area. Certifier's Name: License Number: Title: Company Name: Address:	et the data available. I understand that any
Check here if attachments and describe in the Comments area. Certifier's Name: License Number: Title: Company Name: Address:	lo
Certifier's Name: License Number: Title: Company Name: Address:	
Title: Company Name: Address:	
Company Name: Address:	
Address:	
_	
City: State: 7ID Code:	
org.	
Signature: Date.	
Telephone: Ext.: Email:	Place Seal Here
Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insura	nce 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):
added	added

DINR Indiana Department of Natural Resources WATER
of Natural Resources VVAIEK
Section E
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. added
Building measurements are based on: Construction Drawings* Building Under Construction* 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 chick be 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:
b) Top of bottom floor (including basement, crawlspace, or enclosure) is:
E2. For Building Diagrams 6–9 with perhanent fill od 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 his
E3. Attached garage (top of stab) is:
E4. Top of platform of machinery and/or equipment servicing the building is:
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.

		Se	ction F			
	owner's authorized rep ents in Sections A, B, a				Zone A (without B	FE) or Zone AO must
Check here if attack	hments and describe in	the Comments are	ea.			
Property Owner or Own	ner's Authorized Repre	sentative Name:				
Address:						
City:				State:	ZIP Code:	
Di			Date:			
Signature:	Ext.:	Email:	added			
Telephone:	EXL	Email.	auueu			

Section G 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. added
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:
G9.b. Elevation of bottom of as-built lowest horizontal structural
member:
G10.a. BFE (or depth in Zone AO) of flooding at the building site:
G10.b. Community's minimum elevation (or depth in Zone AO) requirement for the lowest floor or lowest horizontal structural
member: added feet meters Datum:
G11. Variance issued? Yes No fyes, 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.

Indiana Departn of Natural Reso	ent rces	DIVISION WATER							
					Section	G			
Local Official	Name:					Title:			
NFIP Commu	nity Name	:							
Telephone:			Ext.:	Email:	adde	d			
Address:									
City:							State:	ZIP Code:	
Signature:						Date:			
Comments (ir	cluding ty	pe of equipme	ent and loca	tion, per C2	e; descriptio	n of any atta	achments; an	d corrections to sp	ecific information in
Sections A, B	D, E, OI	<u>1).</u>							



DNR Indiana Department of Natural Department	
NE	EW
Sect	ion H
The property owner, owner's authorized representative, or local flood to determine the building's first floor height for insurance purposes. S nearest tenth of a foot (nearest tenth of a meter in Puerto Rico). Refe Instructions) and the appropriate Building Diagrams (at the end	rence the Foundation Type Diagrams (at the end of Section H
H1. Provide the height of the top of the floor (as indicated in Foundal	ion Type Diagrams) above the Lowest Adjacent Grade (LAG):
a) For Building Diagrams 1A, 1B, 3, and 5–9. Top of bottom floor (include above-grade floors only for buildings with subgrade crawlspaces or enclosure floors) is:	feet meters above the LAG
 b) For Building Diagrams 2A, 2B, 4, and 6–9. Top of next higher floor (i.e., the floor above basement, crawlspace, or enclosure floor) is: 	feet meters above the LAG
H2. Is all Machinery and Equipment servicing the building (as listed in H2 arrow (shown in the Foundation Type Diagrams at end of Secondary Yes No	in Item H2 instructions) elevated to or above the floor indicated by the ction H instructions) for the appropriate Building Diagram?
FOR INSURANCE F	PURPOSES ONLY!!!



A floor by any other name...

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 specified on the EC
- Interpreted by the community
- floodplain administrator

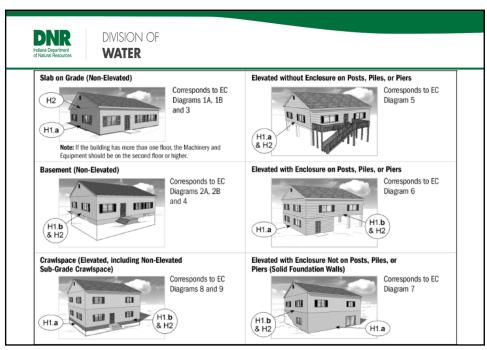
 Based on multiple factors
- Not used for rating insurance
- Determines whether structure is compliant with local floodplain ordinance: "Is Lowest Floor above BFE (plus freeboard)?"

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



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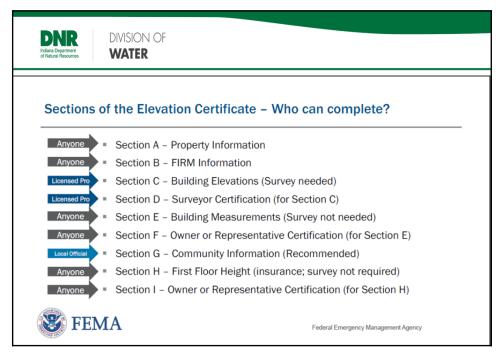
			N	EW			
			Sect	tion I			
	2.b and sign Section	n G.					
_	attachments are pro Owner's Authorize	•		os) and describe	each attachn	nent in the Comm	nents area.
Property Owner o		•		os) and describe (
Property Owner o		•		os) and describe of the control of t	each attachn State:	nent in the Comm	

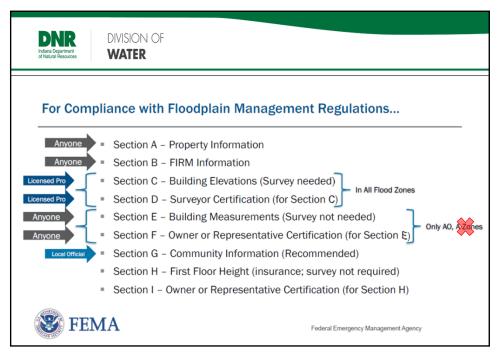


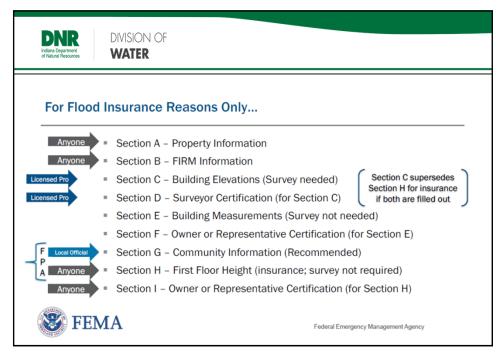
PHOTOGRAPHS

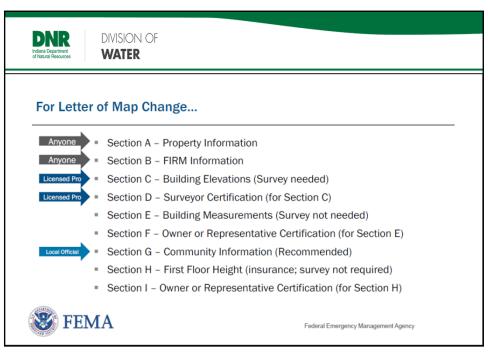
Instructions: Insert below at least two, and when possible four, photographs showing each side of the building (for example, may only be able to take front and back pictures of townhouses/rowhouses).

- 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.











DIVISION OF

WATER

Summary

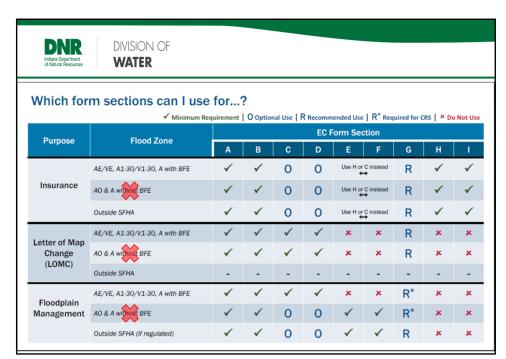
- Two new form sections (H and I) can be used for NFIP insurance policy rating.
- Expanded sections capture additional detail and clarity.
- Section G (for community officials) connects the form to local permit and variance decisions, and documents compliance with higher standards.
- More photographs capture additional building details and are now required regardless of the intended use of the EC form.
- More detailed instructions pages provide better clarity on how to properly complete the EC form.

Email your questions about the new form to nfipunderwritingmailbox@fema.dhs.gov.



Federal Emergency Management Agend

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Questions?

Your respective planner

<u>DOWFPM@dnr.IN.gov</u>

<u>Water_Inquiry@dnr.IN.gov</u>

About the New EC nfipunderwritingmailbox@fema.dhs.gov