



**County of Kaua'i
Department of Public Works
Engineering Division**

POLICY AND STANDARD OPERATING PROCEDURE

NATIONAL FLOOD INSURANCE PROGRAM CONSTRUCTION CERTIFICATE MANAGEMENT

**Documentation
Number: EN-307**

I. POLICY STATEMENT:

The County Engineer adopts this policy and standard operating procedure in accordance with the National Flood Insurance Program's Community Rating System and in alignment with Title V, Chapter 15, Article 1. Floodplain Management, Kaua'i County Code 1987, as amended.




The Department of Public Works and its staff are duly authorized representatives for the County Engineer for implementing this policy and standard operating procedure.

II. PURPOSE:

This policy and standard operating procedure shall be for the management of Elevation Certificates and other floodplain-related construction certificates, especially those required for Community Rating System (CRS) credit as construction certificate management procedures (CCMP) under Activity 310 (Elevation Certificates).

III. APPLICABILITY:

This policy applies to the Department of Public Works, County of Kaua'i, 4444 Rice Street, Suite 175, Lihu'e, HI 96766, under the authority of the County Engineer.

	Original release date: May 27, 2022	Date last revised:
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IV. PROCEDURE:

The Department of Public Works is responsible for the administration of community floodplain management practices within the County of Kaua'i including permitting, inspection, and review of all construction, along with the creation of and maintenance of all building permit files and administrative documents related to building and development. This includes, but is not limited to ordinances, building guides, applications, forms, and outreach materials. All inspections, permit/plan reviews and approvals related to floodplain management are conducted by the Department of Public Works.

The purpose of this document is to explain the procedures for review of Elevation Certificates and all other required floodplain-related construction certificates including, but not limited to, Floodproofing Certificates, V Zone design certificates, and engineered flood opening certificates. These procedures outline the types of certificates required, the collection and review of all certificates, how corrections should be made, where the certificates are stored/archived, and how these certificates are made available to the public.

A. BASE FLOOD ELEVATION AND DESIGN FLOOD ELEVATION

The "Base flood" is defined as "the flood having a one percent (1%) chance of being equaled or exceeded in any given year, otherwise commonly referred to as the 100-year flood."

The "Base flood elevation" (BFE) is defined as "the water surface elevation of the base flood".

The "Design Flood" is defined as "the greater of the following two flood events: (1) the base flood, affecting those areas identified as special flood hazard areas on the community's FIRM; or (2) the flood corresponding to the area designated as a flood hazard area on a community's flood hazard map or otherwise legally designated."

The "Design Flood Elevation" (DFE) is defined as "the elevation of the design flood, including wave height, relative to the datum specified on the community's flood hazard map."

B. TYPES OF CERTIFICATES REQUIRED

When any new construction, substantial improvement or repair for a substantially damaged building is conducted in the Special Flood Hazard Area (SFHA), the Department of Public Works Engineering Division (henceforth "Engineering Division") shall require an Elevation Certificate and any other floodplain-related certificate that is appropriate per the applicable version of the International Residential Code (IRC), International Building Code (IBC), American Society of Civil Engineers (ASCE), and/or the Kaua'i County Code. This shall include but shall not be limited to: Floodproofing Certificate for Non-Residential Structures, Residential Basement Floodproofing Certificate, V Zone design certificate, and certification of engineered flood openings.

C. WHEN CERTIFICATES ARE REQUIRED

Optional:

The applicant may submit a preliminary Elevation Certificate with the building permit application for preliminary review. If submitted, this Elevation Certificate shall be reviewed by the Regulatory Section of the Engineering Division of the Department of Public Works (henceforth "Regulatory Section"). This preliminary review is used to make a preliminary determination as to whether the proposed design is in compliance with Title V, Chapter 15, Article 1. Floodplain Management, Kaua'i County Code 1987, as amended. Specifically, the preliminary Elevation Certificate is intended to show the "Construction drawing" component of the Elevation Certificate. Refer to "Section C – Building Elevation Information (Survey Required), C1: "Building elevations are based on"."

The Regulatory Section may require an Elevation Certificate to be submitted with the building permit application at its own discretion on a case-by-case basis. For example, if the elevation(s) shown on the building permit application are in dispute, the Regulatory Section may require an Elevation Certificate to be submitted for building permit review (prior to the start of construction).

Required:

After the foundation is built and the elevation of the lowest floor is determined, an Elevation Certificate is required to be submitted and marked "building under construction." This will document the elevation of surrounding grades and the lowest floor to ensure they comply with the approved plans before construction progresses.

1. For VE Zones: the Elevation Certificates shall include the elevation of the bottom of the lowest horizontal structural member of the lowest floor, excluding pilings and columns, to ensure it is elevated to or above the design flood elevation. The Elevation Certificate shall also include enclosures of space below the lowest floor with breakaway walls, as space below the lowest floor may be enclosed solely for parking of vehicles, building access, or storage.

2. For A Zones, the Elevation Certificate shall demonstrate compliance with the following:

A. Residential Structures.

All new construction, repetitive loss structures, and substantial improvements of residential structures within AI-30, AE, AO, and AH zones on the community's FIRM shall have the lowest floor (including basements) elevated to or above the design flood level. Fully enclosed areas below the lowest floor that are useable solely for parking of vehicles, building access, or storage in an area other than a basement and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.

Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria: A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

B. Nonresidential Structures.

All new construction, repetitive loss structures, and substantial improvements of nonresidential structures shall either:

- (i) Elevate the lowest floor, including basement, to or above the design flood elevation; or
- (ii) Together with attendant utility and sanitary facilities be floodproofed so that below the design flood level the structure is watertight with walls substantially impermeable to the passage of water and have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

Once construction on the building is finished and all adjacent grading is finalized, a complete and correct "finished-construction" Elevation Certificate must be submitted by the applicant to show the "as-built" characteristics of the structure. A "finished-construction" Elevation Certificate must be received, reviewed, and corrected (if necessary) before a certificate of occupancy is issued. At this point, all other required certificates must also be submitted and reviewed.

If a Floodproofing Certificate for Non-Residential Structures is required for a floodproofed non-residential building, an Elevation Certificate is not required for purposes of the National Flood Insurance Program (NFIP), but the County of Kaua'i will require one to help verify compliance with Title V, Chapter 15, Article 1. Floodplain Management, Kaua'i County Code 1987, as amended. A complete and correct Floodproofing Certificate is required to be submitted to the Regulatory Section once construction is finished on the building and before issuing a certificate of occupancy.

Residential Basement Floodproofing Certificate:

A Residential Basement Floodproofing Certificate is required for a building with a basement that is floodproofed. An Elevation Certificate is also required to help verify compliance with Title V, Chapter 15, Article 1. Floodplain Management, Kaua'i County Code 1987, as amended. A complete and correct Residential Basement Floodproofing Certificate is required to be submitted to the Engineering Division once construction is finished on the building before a certificate of occupancy may be issued.

Coastal High Hazard zones (V Zones):

A V Zone design certificate is required for all new construction and substantial improvement / substantial damage within an identified V Zone on our Flood Insurance Rate Map. The V Zone certificate is required before granting the initial building permit because it certifies the structural design and the proposed methods of construction for the building. A complete and correct Elevation Certificate is also required once construction is finished.

Applicants shall submit Elevation Certificates during construction to ensure they comply with the approved plans before construction progresses. All permit files should contain both the pre-construction V Zone design certificate, the during construction Elevation Certificate, and the finished-construction Elevation Certificate for all new construction and substantial improvement / substantial damage in V Zones.

Engineered Flood Openings:

When engineered flood openings are installed in the foundation of a building, and the Elevation Certificate indicates that they were installed (Sections A8d and A9d on the Elevation Certificate), an engineered opening certification is required to be submitted with the Elevation Certificate to help verify compliance and the insurance rate. Be sure the applicant submits either the International Code Council® Evaluation Service (ICC-ES) form for the engineered opening or an individual certification. Individual certifications must cover the following, at a minimum:

- 1) An identification of the building (address and/or TMK) that has the engineered openings installed;
- 2) The design professional's name, title, address, type of license, the state issuing the license, signature, and seal;
- 3) A statement certifying the design of the openings will automatically equalize hydrostatic flood loads on exterior walls by allowing for the automatic entry and exit of floodwaters; and
- 4) A description of the range of flood characteristics tested or computed for which the certification is valid, such as rates of rise and fall of floodwaters.

D. COLLECTION AND REVIEW OF CONSTRUCTION CERTIFICATES

All finished-construction Elevation Certificates shall be submitted initially to the Regulatory Section for tracking and initial review. The Administrative Support Assistant logs the Elevation Certificate in our tracking system with a PW#, it is then forwarded to the Regulatory Section and Chief of Buildings

(or their authorized representative), who review it and all supporting documentation for initial compliance.

E. REVIEW OF CONSTRUCTION CERTIFICATES

The Regulatory Section reviews the Elevation Certificate and supporting documentation, along with all other required certificates, to ensure all applicable building and development ordinances and standards are met. Upon receipt of the Elevation Certificate and all associated documentation from the Regulatory Section staff, the Floodplain Manager reviews all floodplain-related permit application information to determine approval for the Elevation Certificate. It is then forwarded to the Chief of Buildings or their authorized representative for final approval for all parts of the building permit. The certificate of occupancy (and/or final building permit approval) will not be issued until all problems with an Elevation Certificate and supporting documentation are completely resolved.

F. HOW CERTIFICATES ARE CORRECTED

The Regulatory Section and Floodplain Manager should consult the CRS's Elevation Certificate Checklist when reviewing an Elevation Certificate to ensure all required fields are completed correctly. When an error is noticed on an Elevation Certificate, it should be corrected as follows:

- (1) For any inaccurate or incomplete information in Section C2, the Regulatory Section should request a new certificate from the applicant or his/her representative (surveyor/engineer/architect) who certified the form.
- (2) If incomplete or inaccurate information is found in the other sections, the Regulatory Section can do the following:
 - a) The forms may be returned to the applicant (or representative) with instructions on what needs to be changed or corrected;
 - b) The Regulatory Section can prepare a separate memo with the correct information and attach a "memo of correction." When the certificate is provided to an inquirer, the memo must be included with it; or
 - c) The Regulatory Section can note the changes or corrections in Section G.
 - d) Note: Do not mark up a signed and sealed form.

All finished-construction Elevation Certificates that had errors on them should be returned to the applicant within 10 business days for immediate correction. In no case shall we accept a finished-construction Elevation Certificate until all corrections deemed appropriate by the Regulatory Section or Floodplain Manager are addressed. In no cases shall a certificate of occupancy or final building permit approval be granted until the Regulatory Section or Floodplain Manager have approved the Elevation Certificate.

If errors are identified after the Certificate of Occupancy is issued, the Floodplain Manager must ensure that the corrections are completed in a timely manner and the homeowner receives a copy of the corrected Elevation Certificate in the event that the correction(s) would affect the building's insurance rating.

G. HOW AND WHERE THE CERTIFICATES ARE MAINTAINED

All hard copies of Elevation Certificates and all required construction certificates, as well as all other permit application documentation, shall be stored at the Department of Public Works. They also shall be scanned with building files for storage and archiving in SharePoint.

Hard copies of the finished-construction Elevation Certificates, along with the other required construction certificates (if applicable), shall also be placed in a separate folder containing all Elevation Certificate information for CRS purposes, labeled "Activity 310," organized by CRS recertification date.

Digital copies of the finished-construction Elevation Certificates, along with the other required construction certificates (including Certificate of Occupancy), shall also be uploaded to SharePoint in a folder containing all Elevation Certificate information for CRS purposes, labeled "Activity 310," organized by CRS recertification date.

Elevation Certificates and other required certificates for buildings located outside the Special Flood Hazard Area are to be filed with the address file in the Engineering Division, just like all building permit documents, but copies should also be made and placed in a separate CRS folder, labeled "Activity 430."

H. HOW CERTIFICATES ARE MADE AVAILABLE TO INQUIRERS

When a member of the public requests a copy of an Elevation Certificate, the request shall be logged by the Administrative Support Assistant and routed to the Regulatory Section. The Regulatory Section shall act on the request as soon as possible and provide the requested information to the inquirer, if available. The request shall be fulfilled within 10 business days per Hawai'i Revised Statutes §92F.

I. FEES FOR PUBLIC RECORD REQUESTS

Typically, obtaining elevation certificates is a quick process and fees will be waived for public requests for elevation certificates. In the event that a significant amount of time is required to research a public request for an elevation certificate, fees shall be based on Hawai'i Revised Statutes §92F.

J. RECORDS RETENTION POLICY

All applicable state and local records retention policies shall be observed. This includes, but is not limited to Kaua'i County Council Resolution No. 2008-39 Relating to Records Disposal Policy and Hawai'i Revised Statutes §92F-3. The following flow chart may be used as a reference in following Kaua'i County Council Resolution No. 2008-39 Relating to Records Disposal Policy:

County of Kaua'i - Document Retention Flowchart

