

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

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

DRY FLOODPROOFING CERTIFICATE FOR NON-RESIDENTIAL STRUCTURES

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this data collection is estimated to average 3.25 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and submitting this form. You are not required to respond to this collection of information unless a valid OMB control number is displayed on this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing the burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 500 C Street SW, Washington, DC 20742, Paperwork Reduction Project (1660-0008). **NOTE: Do not send your completed form to this address.**

General: This information is provided pursuant to Public Law 96-511 (the Paperwork Reduction Act of 1980, as amended), dated December 11, 1980, to allow the public to participate more fully and meaningfully in the Federal paperwork review process.

Authority: Public Law 96-511, amended; 44 U.S.C. 3507; and 5 CFR 1320.

PRIVACY ACT STATEMENT

Authority: Title 44 CFR § 60.3, 61.7 and 61.8.

Principal Purpose(s): This information is being collected for the primary purpose of estimating the risk premium rates necessary to provide flood insurance for new or substantially improved structures in designated Special Flood Hazard Areas.

Routine Use(s): The information on this form may be disclosed as generally permitted under 5 U.S.C. § 552a(b) of the Privacy Act of 1974, as amended. This includes using this information as necessary and authorized by the routine uses published in DHS/ FEMA-003 – National Flood Insurance Program Files System or Records Notice 79 Fed. Reg. 28747 (May 19, 2014), and upon written request, written consent, by agreement, or as required by law.

Disclosure: The disclosure of information on this form is voluntary; however, failure to provide the information requested may result in the inability to obtain flood insurance through the National Flood Insurance Program or being subject to higher premium rates for flood insurance. Information will only be released as permitted by law.

PURPOSE OF THE DRY FLOODPROOFING CERTIFICATE FOR NON-RESIDENTIAL STRUCTURES

Under the National Flood Insurance Program (NFIP), the dry floodproofing of non-residential buildings may be permitted as an alternative to elevating to or above the Base Flood Elevation (BFE) or for certain flood zones, the natural Highest Adjacent Grade (HAG). A dry floodproofing design certification is required for non-residential structures that are dry floodproofed and the dry floodproofed non-residential portions of mixed-use buildings. This form is to be used for that certification. FEMA Form 206-FY-21-122 NFIP Residential Basement Floodproofing Certificate is required for the residential portions of mixed-use buildings.

A dry floodproofed building is a building that has been designed and constructed to be watertight (substantially impermeable to floodwaters) below the BFE and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Before a dry floodproofed building is designed, numerous planning considerations, including flood warning time, uses of the building, mode of entry to and exit from the building and the site in general, floodwater velocities, flood depths, debris impact potential, flood frequency, and any other State and local requirements must be addressed to ensure that dry floodproofing will be a viable floodplain management measure.

The minimum NFIP requirement is to dry floodproof a building to the BFE. However, to be in compliance with the requirements of American Society of Civil Engineers (ASCE) 24, *Flood Resistant Design and Construction*, one foot is subtracted from the dry floodproofed elevation. Therefore, a building must be dry floodproofed to one foot above the BFE to be considered for floodproofing credit. For B, C, D, or X flood zones, the building's dry floodproofed design elevation must be at least two feet above the natural HAG to be considered for floodproofing credit.

Additional guidance can be found in FEMA Publication 936, *Floodproofing Non-Residential Buildings* (2013), and NFIP Technical Bulletin 3, *Requirements for the Design and Certification of Dry Floodproofed Non-Residential and Mixed-Use Buildings* (2021), available on FEMA's Building Science Resource Library website at www.fema.gov/er/emergency-managers/risk-management/building-science/publications.

Copy all pages of this Dry Floodproofing Certificate and all attachments for 1) community official, 2) insurance agent/ company, and 3) building owner. The dry floodproofing of non-residential buildings and the non-residential portions of mixed-use buildings may be permitted as an alternative to elevating to or above the Base Flood Elevation (BFE); however, a dry floodproofing design certification is required. This form is to be used for that certification. Dry floodproofing of a residential building does not alter a community's floodplain management elevation requirements or affect the insurance rating unless the community has been issued an exception by FEMA to allow dry floodproofed residential basements. The permitting of a dry floodproofed residential basement requires a separate certification specifying that the design complies with the local floodplain management ordinance.

PROPERTY INFORMATION

Building Owner's Name: <u>WASHINGTON TRUST BANK</u> Building Street Address (Including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: <u>261 BASIN ST. SW</u> City: <u>EPHRATA</u> State: <u>WA</u> ZIP Code: <u>98823</u> Property Description (e.g., Lot and Block Numbers, or Legal Description) and/or Tax Parcel Number: <u>LOT 9,BLOCK 16,THIRD ADD TO EPHRATA,COL.1 PG.13,LOTS1-4,BLOCK 2,REARDAN FIRST ADD.VOL.1 PG 40</u> Building Use (e.g., Non-Residential, Mixed Use, Addition, Accessory, etc.): <u>NON-RESIDENTIAL</u> Latitude/Longitude: Lat. <u>47.318029</u> Long. <u>-119.554287</u> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983 <input type="checkbox"/> WGS 84	FOR INSURANCE COMPANY USE Policy Number: <hr/> Company NAIC Number: <hr/>
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SECTION I – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

NFIP Community Name: CITY OF EPHRATA NFIP Community Identification Number: 530051
 County Name: GRANT COUNTY State: WA Map/Panel Number: 53025C0758C Suffix: C
 FIRM Index Date: 02/18/2009 FIRM Panel Effective/Revised Date: 02/18/2009 Flood Zone(s): ZONE AO
 BFE(s) (Zone AO, use Base Flood Depth (BFD)): DEPTH 1
 Indicate the source of the BFE data or BFD entered above: Flood Insurance Study (FIS) FIRM
 Community Determined Other: _____
 Indicate elevation datum used for BFE shown above: NGVD 1929 NAVD 1988 Other/Source: _____
 Is a Limit of Moderate Wave Action (LimWA) shown on the FIRM? Yes No
 If Yes, is the property located in the Coastal A Zone [area between the LimWA and Zone V boundary (or shoreline)]? Yes No
 Is the property located in a floodway? Yes No If Yes, provide the velocity at the building location: _____
 Is the property located in an alluvial fan? Yes No
 If Yes, provide the depth at the building location: _____ and velocity: _____

SECTION II – DRY FLOODPROOFED DESIGN CERTIFICATION

(By a Registered Professional Engineer or Architect licensed in the State where the building is located)

(Note: For insurance rating purposes in all zones except for B, C, D, or X, the building's dry floodproofed design elevation must be at least one foot above the BFE to be considered for floodproofing credit. For B, C, D, or X Zones, the building's dry floodproofed design elevation must be at least two feet above the natural HAG to be considered for floodproofing credit. If the building is not dry floodproofed to the above-mentioned standards, then the building will be ineligible for floodproofing credit. See the Instructions section for information on documentation that must accompany this certificate if being submitted for flood insurance rating purposes.)

Briefly list measures incorporated into the design to meet the performance criteria for dry floodproofing and attach calculations showing the structure is designed with structural components that have the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy and will be watertight and substantially impermeable to the passage of water.

(1) All openings in brick were filled in to create a solid facade, (2) a floodproofing membrane (Seal Krete Damplock Masonry Waterproofing Paint) was used from -0'-6" Below Grade to 2'-0" Above Finish Floor. (3) areas under cement board siding received a self adhered dry floodproof membrane (Mel-Rol Waterproofing System) (4) Areas in vestibules with storefronts were raised on pony walls with liquid dryproofing membrane (Seal Krete) on backside were installed and (5) placed a removable flood panel system (Garrison Flood Control Aluminum Flood Plank System) at doors. Building was an existing structure, existing conditions were assumed, floorproofing was designed based on that.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:
261 BASIN ST. SW

FOR INSURANCE COMPANY USE

City: EPHRATA State: WA ZIP Code: 98823

Policy Number: _____

Company NAIC Number: _____

SECTION II – DRY FLOODPROOFED DESIGN CERTIFICATION (Continued)
(By a Registered Professional Engineer or Architect licensed in the State where the building is located)

Provide elevations used in design, specifications and construction drawings. In Puerto Rico only, enter meters.

Indicate elevation datum used for the elevations in this section. NGVD 1929 NAVD 1988 Other/Source: _____

Elevation datum used for building elevations must be the same as that used for the BFE. Conversion factor used? Yes No
If Yes, describe the source of the conversion factor in the Comments area of this Section.

- A. Dry Floodproofed Design Elevation: _____ 1279.15 feet meters
- B. Lowest Adjacent Grade (LAG) next to the building: Natural Finished _____ 1274.707 feet meters
- C. Highest Adjacent Grade (HAG) next to the building: Natural Finished _____ 1276.003 feet meters

Non-Residential Dry Floodproofed Design Certification:

I certify the structure, based upon development and/or review of the design and specifications for construction, has been designed in accordance with the accepted standards of practice (ASCE 24-05, ASCE 24-14 or their equivalent) and the following provisions.

- The structure, together with attendant utilities and sanitary facilities will be watertight to the dry floodproofed design elevation indicated above, will be substantially impermeable to the passage of water, and shall perform in accordance with the 44 Code of Federal Regulations (44 CFR 60.3(c)(3)).
- All structural components are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces up to the dry floodproofed design elevation. Flood damage-resistant materials are used for all areas where seepage is intended to collect inside the dry floodproofed areas up to at least 4 inches above the floor.

I certify that the information in Section II on this certificate represents a true and accurate determination by the undersigned using the available information and data. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Certifier's Name: RUSSEL J. WOLFE License Number (or Affix Seal): 6305

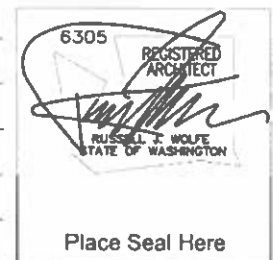
Title: ARCHITECT Company Name: Wolfe Architectural Group

Mailing Address: 1015 N CALISPEL ST. SUITE B

City: SPOKANE State: WA ZIP Code: 99201

Phone #1: (509) 455-6999 Ext.: _____ Phone #2: _____ Ext.: _____

Email: RWOLFE@WAGARCH.COM



Signature:  Date: 1-30-24

Comments (including source of conversion factor and description of any attachments):

1. Attached are photos of the floodproofing systems installed during construction.
2. A Comprehensive Flood Emergency Operations Plan
3. Comprehensive Inspection and Maintenance Plan.
4. Flood Panel Installation Instructions and Map.
5. Owner Acknowledgement of Letter.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: <u>261 BASIN ST. SW</u>	FOR INSURANCE COMPANY USE
City: <u>EPHRATA</u> State: <u>WA</u> ZIP Code: <u>98823</u>	Policy Number: _____ Company NAIC Number: _____

SECTION III – DRY FLOODPROOFED ELEVATION CERTIFICATION
 (By a Registered Professional Land Surveyor, Engineer or Architect licensed in the State where the building is located)

Benchmark Utilized: gps-Ephrata Region Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations provided in this section:
 NGVD 1929 NAVD 1988 Other/Source: _____

Elevation datum used for building elevations must be the same as that used for the BFE. Conversion factor used? Yes No
 If Yes, describe the source of the conversion factor in the Comments area of this section.

A. Dry floodproofed elevation (must be based on finished construction): _____ 1279.15 feet meters

B. Lowest Adjacent Grade (LAG) next to the building: Natural Finished _____ 1274.707 feet meters

C. Natural Highest Adjacent Grade (HAG) next to the building: _____ 1276.616 feet meters

Height of floodproofing on the building above the natural or finished LAG is _____ 4.44 feet.
 (In Puerto Rico only: _____ meters.)

(Note: For insurance rating purposes in all eligible zones inside the SFHA, the building's dry floodproofed design elevation must be at least one foot above the BFE to be considered for floodproofing credit. For B, C, D, or X Zones, the building's dry floodproofed design elevation must be at least two feet above the natural HAG. If the building is not dry floodproofed to the above-mentioned standards, then the building will not be considered for floodproofing credit. See the Instructions section for information on documentation that must accompany this certificate if being submitted for flood insurance rating purposes.)

Non-Residential Dry Floodproofed Elevation Information Certification:

Section III certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information.

I certify that the information in Section III on this Certificate represents a true and accurate interpretation and determination by the undersigned using the available information and data. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Certifier's Name: RUSSEL J. WOLFE License Number (or Affix Seal): 6305

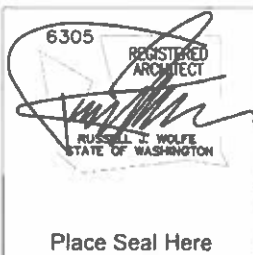
Title: ARCHITECT Company Name: Wolfe Architectural Group

Mailing Address: 1015 N. CALISPEL ST. SUITE B

City: SPOKANE State: WA ZIP Code: 99201

Phone #1: (509) 455-6999 Ext.: _____ Phone #2: _____ Ext.: _____

Email: RWOLFE@WAGARCH.COM



Place Seal Here

Signature: _____ Date: 1.30.24

Comments (including source of conversion factor and description of any attachments):

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: <u>261 BASIN ST. SW</u>	FOR INSURANCE COMPANY USE
City: <u>EPHRATA</u> State: <u>WA</u> ZIP Code: <u>98823</u>	
	Policy Number: _____
	Company NAIC Number: _____

SECTION IV – DRY FLOODPROOFED CONSTRUCTION CERTIFICATION
(By a Registered Professional Engineer or Architect licensed in the State where the building is located)

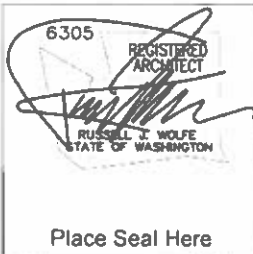
Non-Residential Dry Floodproofed Construction Certification:

I certify the structure, based upon development and/or review of the design, specifications, as-built drawings for construction and physical inspection, has been designed and constructed in accordance with the accepted standards of practice (ASCE 24-05, ASCE 24-14 or their equivalent) and any alterations also meet those standards and the following provisions.

- *The structure, together with attendant utilities and sanitary facilities is watertight to the dry floodproofed design elevation indicated above, is substantially impermeable to the passage of water, and shall perform in accordance with the 44 Code of Federal Regulations (44 CFR 60.3(c)(3)).*
- *All structural components are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy and anticipated debris impact forces up to the dry floodproofed design elevation.*
- *The floodproofed elevation is in accordance with the design and any alteration(s) to the design.*
- *Flood damage-resistant materials have been incorporated/used in all areas where seepage would collect inside the dry floodproofed areas up to at least 4 inches above the floor.*

I certify that the information in Section IV on this certificate represents a true and accurate determination by the undersigned using the available information and data. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Certifier's Name: RUSSEL J. WOLFE License Number (or Affix Seal): 6305
 Title: ARCHITECT Company Name: Wolfe Architectural Group
 Mailing Address: 1015 N. CALISPEL ST. SUITE B
 City: SPOKANE State: WA ZIP Code: 99201
 Phone #1: (509) 455-6999 Ext.: _____ Phone #2: _____ Ext.: _____
 Email: RWOLFE@WAGARCH.COM



Signature:  Date: 1.30.24

**Copy all pages of this Dry Floodproofing Certificate and all attachments for:
1) community official, 2) insurance agent/company, and 3) building owner.**

REQUIRED DOCUMENTATION

In order to ensure compliance and provide reasonable assurance that due diligence had been applied in designing and constructing dry floodproofing measures, the following information must be provided with the completed Dry Floodproofing Certificate:

1. **Photographs.** All photographs must be clear and in color, identified and include the date taken. Where the building is in the course of construction, provide clear descriptions of any other dry floodproofed components and attachments to be incorporated.
 - a. Photographs of all sides and aspects of the floodproofed building.
 - b. Photographs of all components used to provide dry floodproofing protections (shields, gates, barriers, sump pumps, backflow (non-return) valves or shutoff valves, etc.).
 - c. Photographs of the installed barriers/shields and corresponding clear photographs of openings areas where barriers and shields are deployed without the barriers/shields installed (doors, windows, ventilation intakes, etc.).
 - d. Photographs of penetrations through dry floodproofed envelopes (utilities, mechanical).
 - e. Photographs of backup power source for sump pumps.
2. **Comprehensive Flood Emergency Operations Plan** for the entire structure to include but not limited to:
 - a. The personnel, equipment, tools, and supplies needed to deploy all dry floodproofing system components with sufficient time prior to the onset of flooding or conditions such as high winds that could interfere with efficient deployment of measures.
 - b. Clearly defined chain of command and assigned responsibilities for personnel involved in the installation of dry floodproofing measures.
 - c. Procedure for notifying personnel responsible for installing dry floodproofing measures, along with a list of duty requirements.
 - d. Decision tree that identifies the sequence, timeline, and responsible parties for installing the dry floodproofing components, including the triggers or benchmarks that will initiate procedures.
 - e. Written description and map of the storage locations and types of dry floodproofing measures to be installed or deployed (shields, gates, barriers, and components as well as all associated hardware), along with any equipment, tools, and materials required for installation.
 - f. Conditions that require the deployment of active dry floodproofing measures (e.g., installation of flood shields, closing of flood doors, closing of manual valves, staging of pumps).
 - g. Instructions for installing or deploying each dry floodproofing measure and the order of installation if important for effectiveness.
 - h. Instructions for connecting standby (emergency) power source (e.g., generator) for critical equipment such as sump pumps and egress lighting
 - i. Contact information for the manufacturer and designer to expedite obtaining replacement parts and support as needed
 - j. Evacuation plans for all personnel
 - k. Requirements for installation and deployment drills and training program (at least once a year)
 - l. Requirement for regular review and update of the plan procedures
3. **Comprehensive Inspection and Maintenance Plan** for the entire structure to include but not limited to:
 - a. Exterior envelope of the structure, such as wall and foundation systems, to identify possible structural and waterproofing deficiencies such as cracks, water staining, and penetrations.
 - b. All penetrations to the exterior of the structure.
 - c. Slabs and wall/slab joints, including structural and drainage deficiencies.
 - d. Flood shields, gates, panels, doors, glazing, barriers, and other components designed to provide dry floodproofing protection, including all seals, gaskets, fasteners, and mounting hardware and tools.
 - e. Sump pumps (or self-priming pumps) and interior drain system.
 - f. Emergency power systems.
 - g. Testing of emergency generators, sump pumps, and other drainage measures.
 - h. Backflow (non-return) valves or shutoff valves.
 - i. Location of all flood shields, gates, panels, and other components including all hardware along with any materials or tools needed to seal the dry floodproofed area.
 - j. Contact information for the manufacturer of the shields and other components to determine the availability of replacement gaskets, seals, and other parts and to ask questions.
 - k. Cadence of inspection and maintenance plan.
4. **Building owner acknowledgment** that verifies that the owner is aware of the criteria for when the dry floodproofing measures must be installed and that they know how to install all the measures. This would be signed by the owner. Additionally, if the measures are to be installed by a third-party, then the third-party contractor must sign that they know how to install the measures.

DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency

**INSTRUCTIONS FOR COMPLETING THE DRY FLOODPROOFING CERTIFICATE
FOR NON-RESIDENTIAL STRUCTURES**

To receive credit for dry floodproofing, a completed Dry Floodproofing Certificate for Non-Residential Structures is required for non-residential buildings and the non-residential portions of mixed-use buildings in the Regular Program communities, located in all flood zones, including Zone X. For certification of finished construction, this form is invalid without Sections I through IV.

PROPERTY INFORMATION

This section identifies the building, its location, and its owner. Enter the name(s) of the building owner(s), the building's complete street address, and/or property description. If the building's address is different from the owner's address, enter the address of the building being certified. If the address is a rural route or a Post Office box number, enter the lot and block numbers, the tax parcel number, the legal description, or an abbreviated location description based on distance and direction from a fixed point of reference.

A map may be attached to this certificate to show the location of the building on the property. A tax map, FIRM, or detailed community map is appropriate. If no map is available, provide a sketch of the property location, and the location of the building on the property. Include appropriate landmarks such as nearby roads, intersections, and bodies of water. For building use, indicate whether the building is residential, non-residential, an addition to an existing residential or non-residential building, an accessory building (e.g., garage), or other type of structure. Use the Comments area of the appropriate section if needed or attach additional comments.

Provide latitude and longitude coordinates for the center of the front of the building. Use either decimal degrees (e.g., 39.504322°, -110.758522°) or degrees, minutes, seconds (e.g., 39° 30' 15.52", -110° 45' 30.72") format. If decimal degrees are used, provide coordinates to at least 6 decimal places or better. When using degrees, minutes, seconds, provide seconds to at least 2 decimal places or better. Provide the datum of the latitude and longitude coordinates (FEMA prefers the use of NAD 1983). Indicate the method or source used to determine the latitude and longitude in the Comments area.

SECTION I – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Complete the Dry Floodproofing Certificate using the Flood Insurance Study (FIS) and FIRM in effect at the time of the certification.

The information for Section I is obtained by reviewing the FIS and the FIRM panel that includes the building's location. Information about the current FIS and FIRM is available from FEMA by visiting msc.fema.gov or contacting the local floodplain administrator. If a Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), or LOMR Based on Fill (LOMR-F) has been issued by FEMA, please provide the letter date and case number in the Comments area, as appropriate.

For a building in an area that was mapped in one community but is now in another community due to annexation or dissolution, enter the community name and 6-digit number of the community in which the building is now located in the name of the county or new county, if necessary; and the FIRM index date for the community the building is now located in. Enter information from the actual FIRM panel that shows the building location, even if it is the FIRM for the previous jurisdiction. If the map in effect at the time of the building's construction was other than the current FIRM, and you have the past map information pertaining to the building, provide the information in the Comments area.

Note: Indicate in the Comments Section, if using information based on best available data, such as base-level engineering or advisory flood hazard data (contact the local floodplain administrator to confirm).

NFIP Community Name & Community Identification Number. Enter the complete name of the community in which the building is located, and the associated 6-digit Community Identification Number. For a newly incorporated community, use the name and 6-digit number of the new community. Under the NFIP, a "community" is any State or area or political subdivision thereof, or any Indian tribe or authorized native organization which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction. To determine the current community number, see the NFIP *Community Status Book*, available on FEMA's web site at www.fema.gov/national-flood-insurance-program-community-status-book.

County Name. Enter the name of the county or counties in which the community is located. For an unincorporated area of a county, enter the county name and "unincorporated area." For an independent city, enter "independent city."

State. Enter the 2-letter state abbreviation (for example, VA, TX, CA).

Map/Panel Number and Suffix. Enter the 10-character "Map Number" or "Community Panel Number" shown on the FIRM where the building or manufactured (mobile) home is located. For maps in a county-wide format, the sixth character of the "Map Number" is the letter "C" followed by a 4-digit map number. For maps not in a county-wide format, enter the "Community Panel Number" shown on the FIRM.

FIRM Index Date. Enter the effective date or the map revised date shown on the FIRM Index.

FIRM Panel Effective/Revised Date. Enter the effective date shown on the current FIRM panel. The current FIRM panel effective date can be determined by visiting msc.fema.gov or contacting the local floodplain administrator. In addition, if the area where the building is located was revised by a LOMR, include the LOMR effective date.

Flood Zone(s). Enter the flood zone, or flood zones, in which the building is located. All flood zones containing the letter "A" or "V" are considered Special Flood Hazard Areas. The flood zones are A, AE, A1-A30, V, VE, V1-V30, AH, AO, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Each flood zone is defined in the legend of the FIRM panel on which it appears.

BFE(s). Using the appropriate Flood Insurance Study (FIS) Profile, FIS Data Table (e.g., Transect, Floodway, etc.), or FIRM panel, locate the property and enter the BFE (or base flood depth) of the building site to the nearest tenth of a foot (nearest tenth of a meter, in Puerto Rico). If the building is located in more than one flood zone, list all appropriate BFEs.

BFEs are shown in the FIS or on a FIRM for Zones A1-A30, AE, AH, V1-V30, VE, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO; flood depth numbers are shown for Zone AO. Use the AR BFE if the building is located in any of Zones AR/A, AR/AE, AR/A1-A30, AR/AH, or AR/AO.

In unnumbered A or V zones where BFEs are not provided in the FIS or on the FIRM, BFEs may be available from another source. For example, the community may have established BFEs or obtained BFE data from other sources (e.g., Base Level Engineering) for the building site. For subdivisions and other developments of more than 50 lots or 5 acres in Zone A, establishment of BFEs is required per Floodplain Management requirements 44 CFR 60.3(b)(3). If a BFE is obtained from another source, enter the BFE. The BFE entered must be based on hydrologic and hydraulic analyses. In an unnumbered A Zone where BFEs are not obtained from another source, enter N/A.

For areas in which BFEs have not been established, designers can refer to FEMA 265 *Zone A Manual: Managing Floodplain Development in Approximate Zone A Areas* (FEMA 1995), https://www.fema.gov/sites/default/files/documents/fema_approx-zone-a-guide.pdf?id=2215. This guide provides information on obtaining and developing BFEs.

Source of BFE. Indicate the source of the BFE or flood depth that you entered. If the BFE is from a source other than FIS Profile, FIRM, or community, include the name of the study, the agency or company that produced it, and the date when the study was completed. Visit msc.fema.gov or contact the local floodplain administrator to access the current FIS and FIRM.

Elevation Datum. Indicate the elevation datum to which the elevations on the applicable FIRM are referenced as shown on the map legend. The vertical datum is shown in the Map Legend and/or the Notes to Users on the FIRM.

Limit of Moderate Wave Action (LiMWA). Indicate if a LiMWA is shown on the FIRM and the location of the building in relation to the LiMWA.

Floodway. Indicate if building is in a floodway and if applicable, the velocity in the area of the building. See FEMA P-936, *Floodproofing Nonresidential Buildings* for more information on determining the velocity.

Alluvial Fan. Indicate if building is in an alluvial fan and if applicable, the depth and velocity in the area of the building.

SECTION II – DRY FLOODPROOFED DESIGN CERTIFICATION

Section II is to be completed by a Registered Professional Engineer or Architect licensed in the State where the building is located to certify the design of the dry floodproofing measures as required by 44 CFR 60.3(c)(4).

SECTION III – DRY FLOODPROOFED ELEVATION CERTIFICATION

Section III is to be completed by a Registered Professional Land Surveyor, Engineer, or Architect licensed in the State where the building is located to provide the surveyed elevations of the as-built construction. To ensure that all required elevations are obtained, it will be necessary to physically enter the building.

SECTION IV – DRY FLOODPROOFED CONSTRUCTION CERTIFICATION

Section IV is to be completed by a Registered Professional Engineer or Architect licensed in the state where the building is located to certify the structure, based upon development and/or review of the design, specifications, as-built drawings for construction and physical inspection, has been designed and constructed in accordance with the accepted standards of practice (ASCE 24-05, ASCE 24-14 or their equivalent) and any alterations also meet those standards and the provisions listed in Section IV.

Dry Floorproofing Measures at WTB - Ephrata

261 Basin St. SW Ephrata, WA 98823
Dates shown on bottom right corner of images.

1. Basement window on southeast elevation was filled in and a Seal Krete Damplock Masonry Waterproofing Paint was applied.



2. Small openings in brick facade were filled in and a Seal Krete Damplock Masonry Waterproofing Paint (White) was applied to all elevations from 6" below grade to 2'-0" above finished floor level.



3. Building is painted atop Seal Krete, with Lenox XP Waterproofing Masonry Coating (Black)



4. Self adhered sheet waterproofing membrane (SikaBit S-60) installed at areas under windows, applied over a layer of Seal Krete and a layer of waterproofing masonry paint. Wood furring and sheathing was installed over the self adhered membrane to facilitate the installation of the cementitious siding.



5. 25" concrete walls were created at vestibules to reduce areas of potential water infiltration. Walls were coated with Lenox XP Masonry Coating paint. A removable flood panel system (Garrison Flood Control Aluminum Flood Plank System) was installed. The anchors are permanently installed, the 3 panel system is removable.



6. A backwater valve was installed in the basement level to prevent any backflow of sewage into the building in the instance of a flood.



Comprehensive Flood Emergency Operations Plan

- a. **Personnel Required:** Minimum 1 Person

Equipment Required: (3) Flood Panels

Tools Required: (1) Allen Wrench

- b. **Chain of Command:** The person in charge (PIC) must assign a person to transport the (3) flood panels and tools from their storage location to the location of installation. The PIC must ensure all building occupants have exited the building, prior to installing the panels. Once the building has been cleared, the PIC must install the flood panels.
- c. **Procedure for notification:** During Business Hours the PIC will give verbal notification to the personnel responsible for installing dry floodproofing (panels). In the instance of a non-business hours flood warning, the PIC must notify the personnel responsible for installing dry floodproofing (panels) via phone call and send installation instructions via email or text message. A set of installation instructions will be posted at the storage location of the floodproofing and at the area of installation of the floodproofing.
- d. **Decision Tree:** It is the PIC's responsibility to identify, and assign personnel to initiate the installation process for dry floodproofing. Floodproofing procedures must initiate when a total of 2 inches of water have accumulated on the property.
- e. **Location of Flood Panels:** Flood panels are located in room 114 at stair landing. (3) Panels and (1) Allen Wrench are needed for installation. Please refer to attached floor plan for location.
- f. **Conditions Requiring Floodproofing Installation:** Installation of dry floodproofing (panels) should occur when a total of 2 inches of water have accumulated on the property.
- g. **Instructions of Installation:** Please see attached fill for panel installation instructions. Instructions will be posted at 2 conspicuous locations on site.
- h. **Instructions for emergency power:** No emergency power is available; all emergency lighting is battery operated.
- i. **Garrison Panel System Manufactures Contact Information:**
- Garrison Flood Control**
sales@garrisonflood.com
(929) 299-2099
- j. **Evacuation Plans:** All personnel must exit the building through the main doors prior to the installation of the floodproofing panels.
- k. **Training:** All employees must be trained withing a week of employment, and once a year after that.
- l. **Review and Update of Procedures:** Review and update of procedures will occur, every 4 years.

Comprehensive Inspection and Maintenance Plan

- a. **Inspections Required:** Once a year, the person in charge (PIC) must inspect the exterior and interior of the structure to document any cracks, water staining, and penetrations. If any are found, please contact VP of Facilities at:

Jake Melville
AVP, Facilities Manager
717 W. Sprague Ave.
Spokane, WA 99201
(509) 358-3773

- b. Inspections conducted should include but not be limited to:
- i. Exterior Envelope of structure, such as walls and foundation system should be inspected for possible structural and waterproofing deficiencies such as cracks, water staining, and penetrations.
 - ii. All penetrations to the exterior of the structure.
 - iii. Slab and wall/slab joints, including structural and drainage deficiencies.
 - iv. Flood shields, gates, panels, doors, glazing, barriers, and other components designed to provide dry floodproofing protections, including all seals, gaskets, fasteners, and mounting hardware and tools.
 - v. Sump pumps and interior drain systems.
 - vi. Emergency power systems.
 - vii. Testing of emergency generators, sump pumps, and other drainage measures.
 - viii. Backflow (non-return) valves or shutoff valves.
 - ix. Location of all flood shields, gates, panels, and other components including all hardware along with any materials or tools needed to seal the dry floodproofed area.
- c. In case of damage to the floodproofing system, please contact the manufacture for replacement parts or customer service.

Garrison Panel System Manufactures Contact Information:

Garrison Flood Control
sales@garrisonflood.com
(929) 299-2099

IN CASE OF FLOODING

1. EXIT BUILDING
2. INSTALL FLOOD PANELS
3. FIND HIGHER GROUND

PANEL INSTALLATION INSTRUCTIONS

SLOTTING IN PANELS

1. IDENTIFY BOTTOM PANEL WITH LARGER SEAL OFF COMPARED TO SUPPORTING PANELS
2. SLIDE OUT THE POST TENSIONING CAP AND BOLT TO GAIN ACCESS TO THE U-CHANNEL. THEN INSERT THE BOTTOM PANEL
3. CONTINUE TO STACK PANELS FINISHING WITH THE SAFETY TAPE TOP PANEL.

TIGHTENING DOWN PANELS

1. INSERT THE POST TENSIONING PLACE WITH BOLT INTO THE NOTCH AT THE TOP OF THE POST
2. USE THE INCLUDED ALLEN WRENCH TO TIGHTEN DOWN THE PANELS. BE SURE NOT TO OVER TIGHTEN THE PANELS
3. USE THE INCLUDED ALLEN WRENCH TO SCREW DOWN THE PANEL TENSIONING BOLT ON THE POSTS
4. ONCE ALL PANELS ARE TIGHTENED DOWN, THE BARRIER IS READY TO PROTECT AGAINST FLOODING

FLOOD PANEL LOCATION:
ROOM 114



January 30, 2024

To whom it may concern,

Please accept this letter as acknowledgement that Washington Trust Bank located at 261 Basin Street SW, Ephrata, WA 99823 is completely aware of all of criteria when dry floodproofing measures must be installed, we have a clear understanding how to install the flood panel in the event of a flood. We have placed instructions in the building and provided training to the onsite staff members that occupy this location.

Sincerely,



Derek Horton
Facilities Specialist III
Washington Trust Bank