

Summary of FEMA & Local Floodplain Ordinance Requirements for Accessory Structures in the Floodplain

In Berea City limits, there are two options available when building or placing an accessory structure in the FEMA Special Flood Hazard Area or SFHA (normally called the floodplain):

1. Elevate and anchor the structure & utilities 2 feet above Base Flood Elevation (BFE), following all local and FEMA National Flood Insurance Program (NFIP) requirements.
2. Apply for a City of Berea floodplain variance to build or place the structure at-grade, below the BFE, following Wet-Floodproofing requirements listed below.

Definition of accessory structure from Local Ordinance & FEMA:

“A structure located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Accessory structures should constitute a minimal initial investment, may not be used for human habitation, and should be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.”

In order to be exempted from the NFIP elevation requirement, the owner of such structures must obtain a flood variance from the local jurisdiction, and must follow **WET-FLOODPROOFING** requirements:

1. The building must be used only for parking or storage, not human habitation.
2. The building must have openings to allow floodwater in and out (venting).
3. The building must be constructed using flood resistant materials to 2 feet above the BFE. The owner must engage a licensed surveyor to determine BFE.
4. The building must be adequately anchored to resist floatation, collapse, and lateral movement.
5. All building mechanical & utility equipment, including electrical and heating, must be elevated or floodproofed to 2 feet above the BFE.
6. The structure must comply with the floodway encroachment provisions of NFIP Regulations (cannot involve fill, obstructions, etc. that would raise the base flood level or divert flood flows).
7. Must not be modified for a different use after permitting.

WET FLOODPROOFING SPECIFICATIONS:

VENTING SPECS

- At least 2 flood vents or openings shall be installed on at least 2 sides of the structure.
- The bottom of each flood vent is to be installed no more than 1 foot above floor level.
- Provide at least 1 square inch of vent area per square foot of enclosed area.
- Screens may be installed over flood vents but cannot block the flow of water in or out.
- Vents must operate properly without manual operation or the presence of a person.

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FLOOD DAMAGE-RESISTANT MATERIALS SPECS:

- Water-resistant flooring (cement, concrete, tile, marine plywood, preservative treated plywood, synthetic lumber, non-OSB floor beams). Consult NFIP Technical Bulletin 2 for specific acceptable materials:
https://www.fema.gov/sites/default/files/2020-07/fema_tb_2_flood_damage-resistant_materials_requirements.pdf
- Closed cell or plastic foam insulation up to 2 feet above BFE
- Wallboard made of non-paper-faced material up to 2 feet above BFE (can contain gypsum)
- Outlets, switches, electric boxes, and other utilities must be elevated at least 2 feet above BFE. There is an allowance for a minimum amount of electrical equipment to be located below the BFE; that equipment must be flood damage resistant.

ANCHORING SPECS:

- Must be anchored to resist flotation, collapse, and lateral movement from hydrostatic loads or effects of buoyancy. Berea Codes Department will apply KY Building Code for anchoring specs.

VARIANCE SPECS:

FEMA Variance Specs:

FEMA specifies that elevation variances can be issued for accessory structures used solely for parking (two-car detached garages or smaller) or limited storage (small, low-cost sheds). Communities may allow wet floodproofing of these structures in lieu of the elevation requirement, provided that they represent a minimal investment and are designed to have a low damage potential with respect to the structure and contents.

From FEMA 44 CFR § 60.6(a) NFIP Variances and Exceptions, AND Berea Flood Damage Prevention Ordinance §75.018 (E)(3)

“Variances shall only be issued by a community upon:

- (i) a showing of good and sufficient cause,
- (ii) a determination that failure to grant a variance would result in exceptional hardship to the applicant
- (iii) a determination that granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances”

The variance shall include the requirements for wet floodproofing described above.

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FEMA recommends that the local jurisdiction require a Non-Conversion Agreement when non-elevated accessory structures are allowed in the floodplain. This agreement acts as a contract between the City and property owner that the accessory structure shall not be converted to habitable space in the future. The agreement, when recorded with property deeds, will also inform future owners about the limitations and wet-floodproofing requirements placed on the structure for all time. This corresponds to local flood ordinance requirement § 75.018 (F)(2), below.

Excerpts from Berea Flood Ordinance, § 75.018 APPEALS AND VARIANCE PROCEDURES: See Chapter 18 for more detail on variance procedures:

https://codelibrary.amlegal.com/codes/bereaky/latest/berea_ky/0-0-0-38704

§ 75.018 (B) The duties of the variance and appeal board shall be exercised by the Code Enforcement Board.

§ 75.018 (F)(2) A copy of the notice shall be recorded by the floodplain administrator in the Office of the Berea Recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

Please contact the City of Berea Codes and Planning Department with questions:

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Sources: City of Berea Flood Damage Prevention Ordinance (Code of Ordinances Chapter 75), specifically § 75.030; FEMA Policy #104-008-03, Floodplain Management Requirements for Agricultural Structures and Accessory Structures, issued February, 2020; FEMA NFIP Requirements 5-44; FEMA Technical Bulletin 7-93: Wet Floodproofing Requirements (FIA-TB-7); 44 CFR § 60.3 Flood plain management criteria for flood-prone areas; 44 CFR § 60.6 NFIP Variances and Exceptions; NFIP Technical Bulletin 1, March 2020, Requirements for Flood Openings in Foundation Walls and Walls of Enclosures; NFIP Technical Bulletin 2, August 2008, Flood Damage-Resistant Materials Requirements; FEMA Policy #104-008-03, Floodplain Management Requirements for Agricultural Structures and Accessory Structures