

FLOODPROOFING GUIDELINES

Floodproofing is only allowed for a non-residential structure, a non-residential use portion of a mixed-use structure, an accessory structure, or an attached garage

Items that should be obtained when planning a floodproofing project:

- **FEMA Floodproofing Certificate**
- **Technical Bulletin 2-08** – Flood Damage- Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas
- **Technical Bulletin 3-93** - Non-Residential Floodproofing-Requirements and Certification for Buildings Located in Special Flood Hazard Areas

These bulletins should be used as guides for what must be considered when designing a floodproofing project. Section 10-38 of City Code details the specific floodproofing requirements as summarized below:

Specific Requirements – These items must be submitted before the building permit will be released:

1. Pre-Construction Floodproofing Certificate signed by a registered professional engineer or architect.
2. Detailed plans for the floodproofing measures that have been certified by a registered professional engineer or architect. Plans should include:
 - Base Flood Elevation (BFE) and elevation of floodproofing. All elevations should be referenced to the City of Fort Collins Benchmark System. Floodproofing is not allowed if flood depth exceeds 3 feet.
 - Benchmark used.
 - Design details of the floodproofing and locations of the specific floodproofing measures.
 - Direction and distance that all doors swing. Floodproofing closure shields cannot block doors from opening when shields are in place.
3. Manufacturer’s specification sheets if using manufactured measures (i.e. sealants).
4. Manufacturer catalog cuts if ordering measures from a catalog (i.e. gates, shields, etc).
5. All gates or closure shields must have simple directions on the back of the gate or shield that describes how to secure and release the shield. (Ex. Turn RED handle to secure and release shield.). Please supply the wording that will be on these shields.
6. An emergency action plan that includes:
 - A description of where the floodproofing measures will be stored
 - A description of who will be responsible for making sure the measures are in place. If the building is occupied when the closure shields are in place, there must be someone responsible for monitoring the closure shields. Please specify who this person will be.
 - An annual schedule of when the floodproofing measures will be in use. (Recommended May to September)
7. Language that is to be on the required posted notices that inform the occupants of the structure that the building is floodproofed and the location of any equipment in the structure that requires human operation in order for the floodproofing to be effective.
8. Plan of the building that shows where the required floodproofing notices will be posted within the building.
9. Plan for maintenance and inspection of the floodproofing measures.

Additional References:

- “Answers to Questions About Substantially Damaged Buildings,” FEMA, May 1991, FEMA-213.
- “Design Manual for Retrofitting Flood-Prone Residential Structures,” FEMA, September 1986, FEMA-114.
- “Floodproofing Non-Residential Buildings,” FEMA, July 2013, FEMA P-936.
- “Protecting Building Utilities from Damage,” FEMA, November 1999, FEMA-348

Publications are available for review at the Fort Collins Utilities Office (700 Wood Street) or the Fort Collins Public Library (201 Peterson).

City Designated Floodplains-In addition to providing the FEMA information in Section 1, the following Masterplan information must also be included in Section 1: Master Plan Name, Master Plan Figure Number, Master Plan Date, Type of Floodplain, and Master Plan Base Flood Elevation. See the attached sheet for an example of how to fill out Section 1 for a floodproofing certificate in a City Designated Floodplain.

Remember, a post-construction Floodproofing Certificate must be submitted and accepted by the City before the CO is released.