

LA PLATA COUNTY FLOOD PLAIN STANDARDS

HISTORY

In November of 1998 La Plata County received a notice from the Federal Emergency Management Agency in Denver that the excavation and construction method which was used to construct crawlspace type foundations for homes in the 100 year flood plain violated standards contained in the National Flood Insurance Program. The notice required La Plata County to comply with the definition and regulation which apply to enclosed crawlspace type foundations. Those regulations required the finished dirt grade in the crawlspace to be equal to the exterior finished grade. In essence builders could no longer totally excavate the entire crawlspace, construct the foundation footings and stem wall on the bottom of the excavation and finally back fill along the exterior foundation wall system leaving the interior crawlspace grade at or near the footing level. The change in this construction method meant 1) the interior crawlspace grade would have to equal the exterior grade, 2) to meet building code requirements for separation of dirt and wood (floor joist and beams) and frost depth the stem wall height had to be increased. (18" separation between wood and dirt), 3) an engineer or surveyor had to also verify elevation of the interior and exterior grades in addition to the finished floor elevations. Overall the increased height, additional costs of construction and necessary engineering to verify elevations created serious concern and complication for home owners and builders throughout the western United States.

As a result of the controversial changes and subsequent public outcry FEMA once again has made modifications to the previously enforced crawlspace regulations. This change has allowed La Plata County to adopt modified crawlspace standards that will alleviate some of the complications and costs associated with the previous requirement.

NEW OPTIONAL REGULATIONS:

Crawlspace foundations can now be constructed following the attached diagram, but, **OTHER COMPLICATIONS WILL BE CREATED AND MUST BE REVIEWED BY PROPERTY OWNERS AND BUILDERS PRIOR TO MAKING A DECISION ON WHICH FOUNDATION TYPE SHOULD BE CONSTRUCTED.**

Since FEMA wishes to recognize common construction practices that do not increase flood damage the following regulations may be applied to crawlspace type foundations. Even though the following regulations are acceptable they **DO NOT REFLECT THE PREFERRED METHOD OF CONSTRUCTION.**

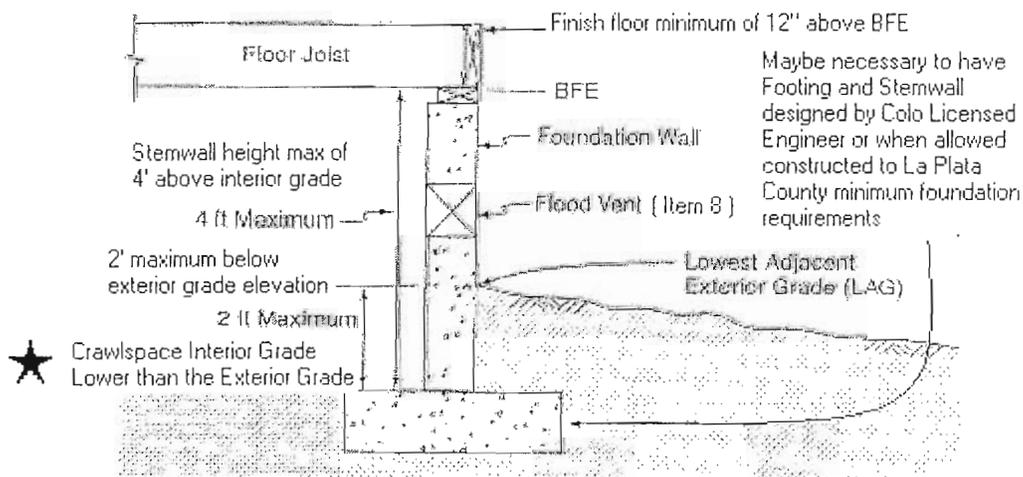
Below-Grade Residential Crawlspace Construction

New construction and substantial improvement of any below-grade crawlspace shall:

- (1) Have the interior grade elevation that is below base flood elevation no lower than two feet below the lowest adjacent grade;
- (2) Have the height of the below grade crawlspace measured from the interior grade of the crawlspace to the top of the foundation wall, not exceed four feet at any point;

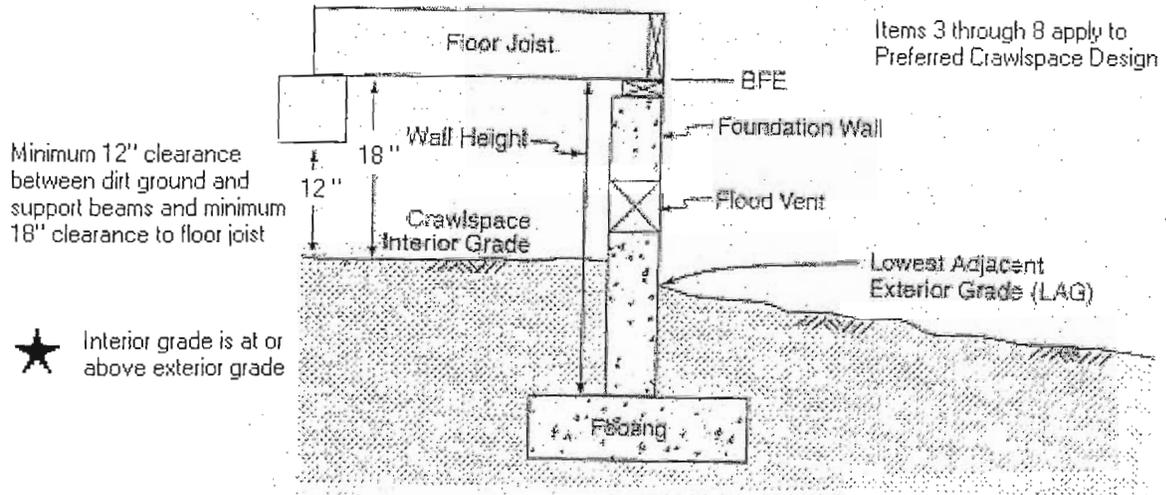
- (3) Have an adequate drainage system that allows flood waters to drain from the interior area of the crawlspace following a flood;
- (4) Be anchored to prevent flotation, collapse, or lateral movement of the structure and be capable of resisting the hydrostatic and hydrodynamic loads;
- (5) Be constructed with materials and utility equipment resistant to flood damage;
- (6) Be constructed using methods and practices that minimize flood damage;
- (7) Be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (8) Be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - (a) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
 - (b) The bottom of all openings shall be no higher than one foot above grade;
 - (c) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

Below-grade crawlspace construction in accordance with the requirements listed above will not be considered basements.



Homes and buildings that are constructed following the below grade crawlspace requirements will have higher flood insurance premiums than buildings using the preferred crawlspace construction method with the interior crawlspace grade at or above the lowest exterior grade.

Preferred Crawlspace Construction Method



Property owners that will be building in the 100 year flood plain must evaluate the long term costs for increased annual flood insurance premiums and the one time cost savings associated with the below-grade crawlspace method and regulations. Insurance Agents will have to submit applications for below grade crawlspace foundations through a submit to rate process.

For additional information contact La Plata County Building Department, 1060 E. Second Avenue, Durango, Colorado 81301 - 970-382-6250.