Just because your home or building is in the floodplain does not mean that you can’t reduce your flood insurance premiums. In fact, your building may have been built in a way that increases the cost of your annual premiums. This brochure identifies the most common causes of high flood insurance rates and provides options that could reduce the amount you pay. If you’re considering making a change to your home, whether it is a repair, remodel, or brand new building, consider some common practices that will provide you with the most affordable flood insurance rates and reduce your risk from suffering flood damage.

Consider the elevated house in this brochure. Originally built in a floodplain after Flood Insurance Rate Maps were published, the mortgage company requires these homeowners to carry $100,000 of flood insurance coverage. Their annual premium was $1,255 per year. However, after they installed proper flood openings, elevated their utilities, removed the sub-grade crawlspace, and elevated the home, their premium was reduced to $190 per year for the same amount of coverage. Addressing just one of these modifications could reduce the annual cost of your flood insurance premium.

This brochure is intended to show activities that can affect flood insurance premiums. The methods and techniques to accomplish these structural modifications must be done in accordance with local building codes.

For more information on relocation, see FEMA Technical Manual 312, Homeowner’s Guide to Retrofitting.

Find more resources and information by visiting FEMA online at:

www.fema.gov/nfip/library.shtm
www.fema.gov/techbul.shtm
If you locate any machinery or equipment that services your building (i.e., electrical, heating, ventilation, plumbing, and air conditioning equipment) below the base flood elevation, an additional surcharge will be added to your insurance premium causing your annual insurance rates to increase. If your house was elevated to a safer level, maximize your savings and reduce your losses by relocating your machinery and equipment above the base flood elevation. Consider using your attic, an extra closet, or an elevated platform (as shown) to store utilities.

For more information on relocating utilities see FEMA publication 259: Engineering Principles and Practices of Retrofitting Floodprone Residential Structures.

One common reason why insurance policies are rated so severely is due to a lack of proper flood openings. IBC/IRC minimum building code requirements for “foundation vents” in areas outside the floodplain may not meet the same specifications as “flood openings” or “flood vents” within a floodplain. For buildings in the floodplain, there must be at least two openings with 1 sq. inch of opening per sq ft of enclosed area, and the bottom of those openings can be no higher than 1 ft above the exterior finished grade. There are no discounts for “partial credit.” If you have 1000 sq feet of enclosed crawlspace and 900 sq inches of openings, you will be charged as though there are no openings (i.e., basement loading fees could apply). Don’t forget that garage doors, windows, and doors do not count as flood openings unless they have openings installed within them.

For more information on flood openings, see FEMA Technical Bulletin 1-93

Unless explicitly authorized, basements in new buildings constructed in the floodplain are prohibited. FEMA considers “crawlspace” that are sub-grade on all sides to be basements as well. If your community has adopted building standards that allows such construction, homeowners in the floodplain with an excavated sub-grade crawlspace will bear an additional financial burden through a 15-20% increase on their flood insurance premiums. When building, you can save that cost by backfilling any excavated areas within the foundation. It can also be done at a later date by using pea-gravel or other suitable material to raise the interior crawlspace floor elevation to the same height or higher than the exterior finished grade.

For more information on basements, see FEMA Technical Bulletin 11-01

Elevating above the base flood elevation is the fastest way to reduce the cost of your annual flood insurance premium. You can save hundreds of dollars for every foot the elevated floor is located above your community’s established base flood elevation. Elevating just one foot above the base flood elevation often results in a 30% reduction in annual premiums. A homeowner with an elevated home, like the one shown on this poster with its first floor elevated 3 feet above the base flood elevation, can expect to save 60% or more on annual flood insurance premiums.

For more information on elevation, see FEMA Technical Bulletin 2-93