

BUILD STRONGER – BUILD SAFER

Anywhere it can rain, it can flood. Floods are the most common natural disaster in the United States. You don't need to live on the coast to be at risk. Flash floods, inland flooding, and seasonal storms affect every region of the country, severely damaging homes and businesses.

Mitigation activities help homeowners and businesses to build stronger and safer to reduce the future loss of life and property. The National Flood Insurance Program (NFIP) offers options for properties that may be high risk to be insured and ultimately offering assistance after a flood event.

Floodproofing is any combination of structural and non-structural additions, changes or adjustments which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Reducing your flood insurance premiums is not impossible because your home or building is in the floodplain. Your building may have been built in a way that increased the cost of insurance, but there are ways to reduce your premium. This brochure identifies the most common causes of high insurance rates and provides construction options that could reduce the amount you pay.

If you are considering a change to your home – whether it is a repair, remodel, or a brand new building – consider some common practices that will provide you with the most affordable flood insurance rates and ways to reduce your risk from suffering future flood damages.

You **MUST** obtain a floodplain permit before starting any repairs or rebuilding on your property. For further assistance with permitting, visit www.dhsem.wv.gov using the “Floodplain Management” page and search for the name of your local Floodplain Manager.

Additional information can be found at:

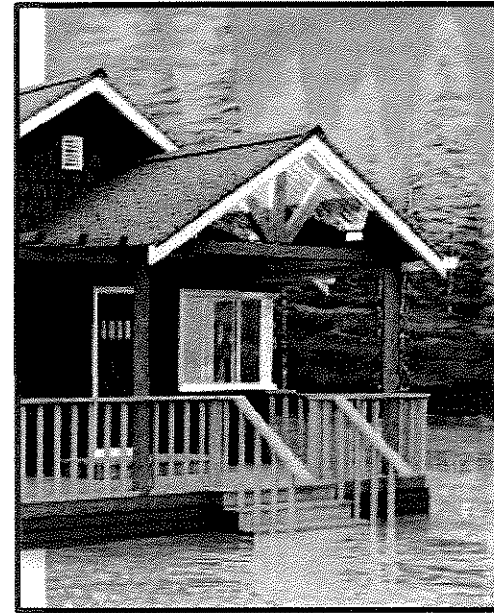
www.mapwv.gov/flood

www.FEMA.gov

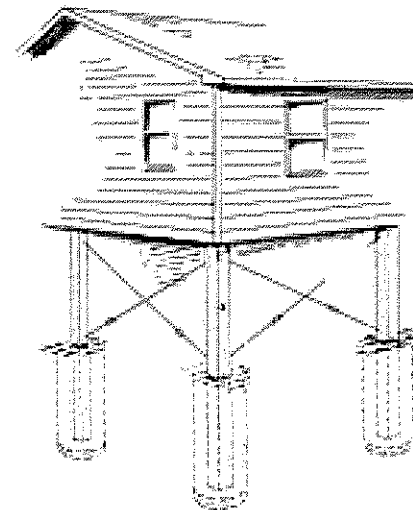
National Flood Insurance Hotline 800-427-4661

www.Floodsmart.gov

www.Ready.gov

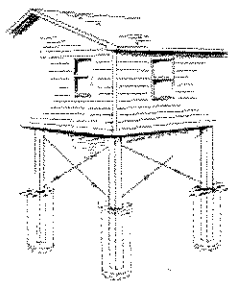


HAZARD MITIGATION



FEMA

MITIGATION RECONSTRUCTION



Mitigation reconstruction is defined as the construction of improved, elevated buildings on the same site where an existing building and/or foundation has been partially or completely destroyed. These projects

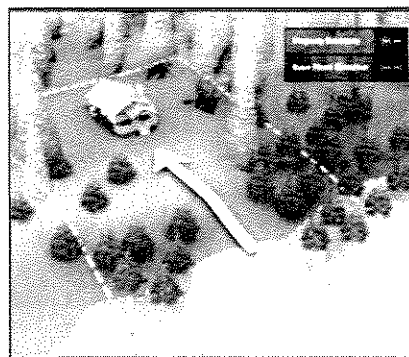
may include either total or partial demolition of the structure and will result in the construction of code-compliant and hazard-resistant structures on elevated foundation systems.

Mitigation reconstruction projects shall be designed/constructed to minimum standards as established by the requirements of the 2009 International Codes and ASCE 24 engineering standards for structures in a special flood hazard area. All homeowners MUST obtain local building and floodplain construction permits.

RELOCATE STRUCTURES

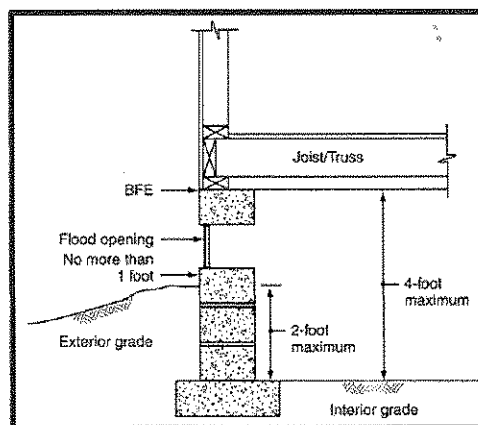
One of the most effective options is to relocate your home on an area of your property that has a natural grade above the base flood elevation (BFE). This method may be costly, but can significantly reduce flood insurance premiums. If you are preparing to build a new home or structure, evaluate your property to determine if there is a suitable building area outside of the floodplain. Be warned: homes constructed outside the floodplain (or on natural ground above the base flood elevation) are never 100% safe from flooding. On average, between 20-25% of all flood insurance claim payouts go to

buildings that are located outside of the special flood hazard area. If your home is located outside the floodplain and you still want coverage, affordable “Preferred Risk” policies are available.



ELEVATE BUILDINGS

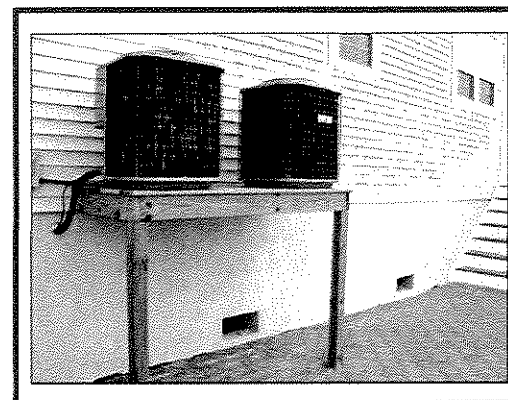
Elevating above the base flood elevation (BFE) is the fastest way to reduce the cost of your annual flood insurance premium. You can save hundreds of dollars for every foot the elevated floor is located above your community’s established base flood elevation. Elevating just one foot above the BFE often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



ELEVATE UTILITIES

If you locate below the base flood elevation (BFE) any machinery or equipment (i.e., electrical, heating, ventilation, plumbing, and/or air-conditioning unit) that services your building, an additional surcharge will be added to your insurance premium causing your annual insurance rates to increase. If your house was elevated above BFE, maximize your savings and reduce your losses by also relocating your machinery and equipment above the BFE. Consider using your attic, an extra closet, or an elevated platform to store utilities safely.

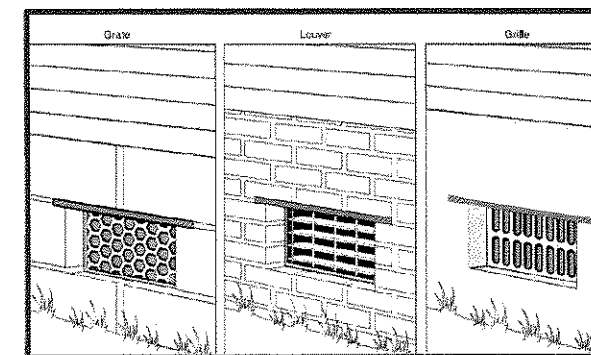
For more information on relocating utilities, see FEMA Publication 259: *Engineering Principles and Practices of Retrofitting Floodprone Residential Structures*.



CREATE FLOOD OPENINGS

One common reason why insurance policies are rated so severely is due to a lack of proper flood openings. IBC/IRC (International Building Code/ International Residential Code) minimum building code requirements for ‘foundation vents’ may not meet the same specifications as ‘flood openings’ or ‘flood vents’ within a floodplain.

If enclosure walls are not designed with openings to relieve the pressure of standing or slow-moving water against them (called hydrostatic loads), the walls can be damaged or fail during a flood. If the walls are “load-bearing” walls that support the elevated building, failure of the walls may result in damage to, or collapse of the building.



To address this concern, the NFIP regulations require that enclosure walls contain openings that will allow for the automatic entry and exit of floodwaters. These openings allow floodwaters to reach equal levels on both sides of the wall, thereby lessening the potential for damage caused by a difference in hydrostatic loads on opposite sides of the walls. Requirements for flood openings in an A zones apply to all enclosed areas below newly elevated buildings and substantially improved buildings.

Construction regulations and guidance are available from your local building department or refer to FEMA Technical Bulletin I *Openings in Foundation Walls and Walls of Enclosures*