



Avoiding Flood Damage: A Checklist for Homeowners

F E D E R A L E M E R G E N C Y M A N A G E M E N T A G E N C Y

Are you looking for ways to protect your home from flooding? There are many things you can do, depending on the flood hazard in your area, the characteristics of your property, and the zoning and building codes in your community. Some methods are fairly simple and inexpensive; others will require a professional contractor.

This homeowner's checklist will help you become familiar with what you can do. For more information about the costs and benefits of each method, talk to a professional builder, architect or contractor. You should also ask your building department about building permit requirements.

▶ **Do you know your flood risk?**

Call your local emergency management office, building department or floodplain management office for information about flooding. Ask to see a flood map of your community. There may be a projected flood elevation for your neighborhood. This information will help you determine how much water is likely to come in.

▶ **Do you have enough flood insurance?**

Even if you have taken steps to protect your home from flooding, you still need flood insurance if you live in a floodplain. Homeowners' policies do not cover flood damage, so you will probably need to purchase a separate policy under the National Flood Insurance Program (NFIP).

It takes 30 days for a flood policy to take effect. This is why you need to purchase flood insurance before flooding occurs.

If your insurance agent is unable to write a flood policy, call 1-800-638-6620 for information.

▶ **Is the main electric switch-box located above potential flood waters?**

The main electric panel board (electric fuses or circuit breakers) should be at least 12" above the projected flood elevation for your home. The panel board height is regulated by code. All electrical work should be done by a licensed electrician.

▶ **Are electric outlets and switches located above potential flood waters?**

Consider elevating all electric outlets, switches, light sockets, baseboard heaters and wiring at least 12" above the projected flood elevation for your home.

You may also want to elevate electric service lines (at the point they enter your home) at least 12" above the projected flood elevation.

In areas that could get wet, connect all receptacles to a ground fault interrupter (GFI) circuit to avoid the risk of shock or electrocution.

Have electrical wiring done by a licensed electrician.

▶ **Are the washer and dryer above potential flood waters?**

For protection against shallow flood waters, the washer and dryer can sometimes be elevated on masonry or pressure-treated lumber at least 12" above the projected flood elevation. Other options are moving the washer and dryer to a higher floor, or building a floodwall around the appliances.

▶ **Are the furnace and water heater above potential flood waters?**

The furnace and water heater can be placed on masonry blocks or concrete at least 12" above the projected flood elevation, moved to inside a floodwall or moved to a higher floor. (You have more

options for protecting a new furnace. Ask your utility about rebates for new energy efficient furnaces. The rebate plus the savings in fuel costs could make the purchase feasible.)

Furnaces that operate horizontally can be suspended from ceiling joists if the joists are strong enough to hold the weight. Installing a draft-down furnace in the attic may be an option if allowed by local codes. Some heating vents can be located above the projected flood elevation.

Outside air conditioning compressors, heat pumps or package units (single units that include a furnace and air conditioner) can be placed on a base of masonry, concrete or pressure treated lumber.

All work must conform to state and local building codes.

▶ **Is the fuel tank anchored securely?**

A fuel tank can tip over or float in a flood, causing fuel to spill or catch fire. Cleaning up a house that has been inundated with flood waters containing fuel oil can be extremely difficult and costly.

Fuel tanks should be securely anchored to the floor. Make sure vents and fill line openings are above projected flood levels.

Propane tanks are the property of the propane company. You'll need written permission to anchor them. Ask whether the company can do it first.

Be sure all work conforms to state and local building codes.

▶ **Does the floor drain have a float plug?**

Install a floating floor drain plug at the current drain location.

If the floor drain pipe backs up, the float will rise and plug the drain.

▶ **Does the sewer system have a backflow valve?**

If flood waters enter the sewer system, sewage can back up and enter your home. To prevent this, have a licensed plumber install an interior or exterior backflow valve. Check with your building department for permit requirements.

You may have other options for avoiding flood damage depending on your needs and financial resources. These include building drainage systems around the property, sealing openings such as low windows, building levees, constructing exterior floodwalls around basement doors and window wells, improving exterior walls, elevating buildings above projected flood levels and relocating buildings away from floodplains.

For more information, talk to a professional builder, architect or contractor. Ask your building department about building permit requirements.