



Mitigation for Homeowners

Mitigation is the effort to reduce the loss of life and property by lessening the impact of disasters. Stated plainly, mitigation can keep natural hazards, like flooding and hurricanes, from having catastrophic impacts.

Mitigation reduces a property's risk to future events and allows residents to return home more quickly, with less damage, after an event. While it may involve a larger initial investment, mitigation pays off in the long run. In fact, estimates indicate that on average, for every \$1 spent on mitigation, \$4 are saved from future losses.

Mitigation Options for Homeowners

There are a wide range of options for protecting your home from flood and wind events through mitigation. Be sure to consult with a licensed contractor and the local building department before making any structural changes to understand requirements and obtain any necessary permits.

Flood Mitigation Options

- Anywhere it rains, it can flood. Protect your investment in your home by purchasing flood insurance, even if you do not live in a high-risk flood zone.
- Elevate your home's lowest floor above the Base Flood Elevation (BFE). Elevating can lower flood insurance premiums and reduce the risk from increased future flood levels.
- Elevate or floodproof HVAC and/or mechanical units, ductwork, electrical systems, and other utilities above the BFE to protect against flood damage and reduce repair costs.
- Install flood vents in foundation walls, garages, and other enclosed areas. Flood vents reduce flood damage by allowing water to flow through and drain out.
- Use flood-resistant materials in areas of your home below the BFE, like replacing carpeting with tiles or using flood-resistant insulation and gypsum wallboard (Sheetrock), to prevent water from doing major damage.
- Anchor any fuel tanks to the floor and make sure vents and fill line openings are above the BFE (this may require permission from your fuel provider). A fuel tank can tip over or float in a flood, spilling fuel and becoming a fire hazard.
- Install a backflow valve on your sewer system to prevent sewage back up in your home.
- Add waterproof veneer to exterior walls to prevent shallow flooding from damaging your home. Seal your basement walls with waterproofing compounds.

Wind Mitigation Options

- Install hurricane shutters to protect windows and glass doors.

Before you mitigate, know your risk

Before you mitigate, you need to know what you are protecting your property from. Your local floodplain manager and emergency manager can give you information on the wind and water hazards possible in your community.

In addition, flood mitigation projects are usually benchmarked against the Base Flood Elevation (BFE) for your area. The BFE is the level floodwater is expected to reach during a flood event that has a one-in-100 chance of occurring in any given year. The BFE is shown on the Flood Insurance Rate Map (FIRM) and in the Flood Insurance Study. To find your BFE, talk to your floodplain manager.

- Gable end roofs are more susceptible to high wind than other roof types. If you have a gable end roof, add bracings to reinforce the roof.
- Consider fastening the roof to the walls with hurricane straps.
- Reinforce garage doors and double-entry doors to prevent failure under wind pressure. Garage doors can be reinforced with girts and by strengthening the glider wheel tracks. Double-entry doors can be reinforced with a heavy-duty dead bolt, adding slide bolts on one of the doors, and using longer hinge attachments on the door and frame.
- Maintain your property. Anything from loose shingles to trees can become a windborne missile. The distance between your home and any tree should be greater than a full-grown tree's height.

General Protective Measures

Mitigation reduces or eliminates future losses, but you should also consider other measures to protect your family, your valuables, and your peace of mind.

- Have a go-kit and make an emergency plan. Instructions and templates are available from [Ready.gov](https://www.ready.gov). Familiarize yourself with local emergency and evacuation plans.
- Consider purchasing a generator for your home that automatically turns on when the power goes out. If you install one, elevate it above the BFE.
- Store important documents and sentimental items like photographs above the BFE (preferably on an upper floor). Make copies of your photos and store them in more than one location.

Mitigation Requirements for Homeowners

If your local community official determines your home to be substantially or repetitively damaged by flood, you may be required to bring the structure into compliance with the community's local floodplain management ordinance. If that's the case, you may be able to utilize up to \$30,000 if you have a flood insurance policy issued through the National Flood Insurance Program (NFIP) which offers a coverage called Increased Cost of Compliance (ICC). ICC provides financial assistance to eligible policyholders to offset the costs to mitigate structures relatively faster than without having flood insurance. For more information, talk to your insurance agent.

Interested in learning more about how to mitigate?

FEMA produces mitigation guidance for communities, businesses, and homeowners, including:

- [Building Science Publications: Flood and Wind](#)
- [Protecting Your Home and Property From Flood Damage](#) (also available in Spanish)
- [Homeowner's Guide to Retrofitting](#)
- [Mitigation's Value to Your Community Fact Sheet](#)

FEMA also provides grant funding for certain kinds of mitigation projects under the [Hazard Mitigation Assistance](#) Program. This funding must be accessed via your local government. Contact your local emergency management agency for more information.

"FEMA's mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards."