

Home > Building Safety Month > Building Safety Month 2014

Code Officials: Helping Homeowners Weather the Storm

Presenting Sponsor



America's Cement Manufacturers™

www.cement.org



Prepare Your Family

Making sure your family is prepared for any natural disaster is important. Below are some of the steps you can take to prepare your family and protect your home from natural disasters. Your actions can ensure that no matter what Mother Nature brings, you, your family and your community will be resilient.

Here are a few tips to follow from the [Federal Alliance for Safe Homes – \(FLASH®\)](#) when preparing your family for any emergency.

- Develop a [family disaster plan](#) that includes a list of food and water supplies needed for each member of your family and supplies for your pets. Make copies of important documents like insurance policies, the deed to your home, and other personal papers, important phone numbers and a home inventory. Create a checklist of important things to do before, during and after a disaster.
- Review your [evacuation route](#) and emergency shelter locations with your family. Options for evacuation would include staying with friends and relatives, seeking commercial lodging, or staying in a mass care facility operated by disaster relief groups in conjunction with local authorities.
- Taking shelter is critical in times of disaster. [Sheltering in place](#) is appropriate when conditions require that you seek protection in your home, place of employment, or other location where you are when disaster strikes.

Review your plan regularly. If you make changes that affect the information in your disaster plan, update it immediately.

Protect Your Home

The power of these natural disasters can be overwhelming. While you can't necessarily stop natural disasters from happening, there are steps you can take to increase your home's chance of survival, even in the face of the worst Mother Nature can dish out.

Earthquakes

If the [earthquake](#) occurs in a populated area, it may cause deaths, injuries and extensive property damage. Here are some helpful tips to prepare your family and protect your home.

- Plan and hold earthquake drills for your family. To learn more about planned earthquake drills in your area, visit <http://www.ShakeOut.org>
- Identify two ways to escape from every room in the home.
- Keep a flashlight and sturdy shoes by each person's bed.

- Select a safe location away from the home where your family can meet after evacuating.
- Have an earthquake kit containing water, food, medicines and other necessities for at least three days
- Make sure your home is securely anchored to its foundation
- Strap water heaters, appliances and TVs to wall studs.
- Anchor bookshelves, heavy furniture, appliances and televisions to wall studs.
- Secure pictures, mirrors and ornaments to the wall with appropriate fasteners.
- Know where and how to shut off electricity, gas, and water services.

More Information on [Preparing For an Earthquake](#) by **Simpson Strong-tie**

Additional Guidance from FEMA

Number

[Earthquake School Hazard Hunt Game and Poster](#)

[Earthquake Home Hazard Hunt Poster](#)

[Earthquake Publications for Individuals and Homeowners](#)

[Earthquake Safety Checklist](#)

[Earthquake Safety Guide for Homeowners](#)

[FEMA Earthquake Mitigation video](#) showcases Hearst Castle and a business owner both of whom mitigated for earthquake risk, thus saving priceless cultural treasures, properties and human lives

[Homebuilders' Guide to Earthquake Resistant Design and Construction](#)

[Reducing the Risks of Nonstructural Earthquake Damage — A Practical Guide, Fourth Edition](#)

[What To Do Before, During, and After an Earthquake](#) a 1-page summary of FEMA 530

FEMA 528

FEMA P-711CD

FEMA 526

FEMA 530

FEMA 232

FEMA E-74

Flood

Devastating [floods](#) occur throughout the U.S. every year. Ninety percent of all presidentially declared natural disasters involve flooding. Flooding is usually divided into two categories: flash flooding and river flooding. Both can cause death, injury and property destruction. If you are building or retrofitting your home consider these recommendations:

- Elevating your home above the [base flood elevation](#) (the elevation associated with the "100-year flood") is the best method of protecting your home, and is a requirement for new homes.
- [Wet flood proofing](#) your home allows flood water to flow through the structure. An example of wet flood proofing is installing flood vents that create permanent openings in the foundation.
- [Dry flood proofing](#) your home prevents floodwaters from entering the building. An example of dry flood proofing is installing new brick veneer over asphalt coating and applying polyethylene film over existing walls.
- Construct non-supporting, break-a-way walls designed to collapse under the force of water without causing damage to the foundation.

Additional Guidance from FEMA

Number

[Protect Your Property From Flooding Fact Sheets](#)

[2008 Midwest Floods in Iowa and Wisconsin Recovery Advisories](#)

[Homeowner's Guide to Retrofitting](#)

FEMA L-235

[Homeowner's Guide to Retrofitting Second Edition](#)

FEMA P-312

[Above the Flood Elevating Your Flood Prone House](#)

FEMA 347

[FEMA Map Service Center](#) provides access to Flood Maps and flood-related Databases

[Flood Resistant Building Code Resources](#)

[FloodSmart Cost of Flooding Interactive Tool](#) shows what a flood could cost homeowners

[FloodSmart Levee Simulator](#) shows different ways a levee can fail and reminds everyone that a levee doesn't guarantee your home's protection

[FloodSmart Regional Fact Sheets](#) explain facts about flooding in each region, risks during Summer Storms & Hurricane Season, and informational tips to reduce risk:

[FloodSmart Testimonial Videos](#) are real life stories about flooding and its aftermath

[Engineering Principles and Practices of Retrofitting Floodprone Structures](#)

FEMA 259

[Floodproofing for Non-Residential Structures](#)

FEMA 102

[Manufactured Home Installation in Flood Hazard Areas](#)

FEMA P-85

[NFIP Technical Bulletins](#)

[Protecting Building Utilities from Flood Damage](#)

FEMA P-348

Hurricanes

A well-built home can stand up to [hurricanes](#). FLASH provides homeowners the tools to make sure your house is hurricane-ready with the [Protect Your Home in a FLASH](#) program.

- The best place to start is with a [Do-It-Yourself Wind Inspection](#) to find out what is ok with your house and what needs attention.
- In a high wind event anything can become a dangerous flying object. Take a day to make your [landscaping more hurricane resistant](#).
- Check to see if your [gutters are clear of leaves](#) and other debris to prevent flooding.
- [Improve your roof's resistance](#) to uplift by applying a 1/4 -inch bead of caulk of along the intersection of the roof deck and the roof support element (rafter or truss chord) on both sides with a caulking gun.
- If your home is not protected by impact-resistant windows and doors or impact-resistant shutters or panels, consider [building your own temporary emergency panels](#).

More Information on [Preparing for Hurricanes](#) by Simpson Strong-Tie

Additional Guidance from FEMA

Number

[Coastal Construction Manual](#)

FEMA P-55

[Cleaning Flooded Buildings: Hurricane Sandy Fact Sheet](#)

[Home Builder's Guide to Coastal Construction](#)

FEMA P-499

[Hurricane Ike Recovery Advisories](#)

[Hurricane Isaac Recovery Advisories](#)

[Hurricane Katrina Recovery Advisories](#)

[Hurricane Sandy Recovery Advisories](#)

[Local Officials Guide for Coastal Construction, FEMA P-762](#)

[Recommended Residential Construction for Coastal Areas: Building on Strong and Safe Foundations](#)

FEMA P-550

Tornados and High Winds

A properly built, high wind safe room protects your family from the most intense [tornadoes and hurricanes](#) and can be incorporated into a planned build or renovation to create a multiuse space in your home, adding to its value. FLASH urges homeowners to "[Give an Ordinary Room an Extraordinary Purpose](#)" by building or retrofitting interior spaces in their home to safe-room standards.

- Tornado safe rooms are designed to withstand winds up to 250 miles per hour, and offer lifesaving refuge for families in the path of high-wind events like tornadoes.
- A safe room designed to meet standards set forth by the National Storm Shelter Association, the International Code Council and FEMA and will stand up to the most intense tornadoes and hurricanes.
- Safe rooms can be located anywhere on the first floor of your home, in a basement or outside. A safe room can double as a closet, bathroom, laundry or even an outdoor room like a garden shed or pool house.

More Information on [Preparing for Tornados](#) and High Winds by **Simpson Strong-Tie**

Additional Guidance from FEMA

Number

[2011 Tornadoes in Alabama, Mississippi, Tennessee, Georgia, and Missouri Recovery Advisories](#)

[Community Safe Room Fact Sheet](#)

[Protect Your Property from High Winds Fact Sheets](#)

[Residential Safe Room Fact Sheet](#)

[Tornado Safe Room Videos](#)

1

[Design and Construction Guidance for Community Safe Rooms](#)

FEMA P-361

[Taking Shelter From the Storm Building a Safe Room For Your Home or Small Business](#)

FEMA P-320 –

[Taking Shelter From the Storm Building a Safe Room for Your Home or Small Business](#) (brochure)

FEMA L-233

[Tornado Protection Selecting Refuge Area in Buildings](#)

FEMA P-431

[Wind Retrofit Guide for Residential Buildings](#)

FEMA P-804

Wildfires

Each year, thousands of acres of wildland and many homes are destroyed by fires that can erupt at any time of the year. [Wildfires](#) spread quickly, igniting brush, trees and homes. You can [protect your home](#) by following these tips.

- Prevent wildfire damage by developing a defensible space in your landscaping by clearing at least 30 feet around your home, or 50 feet around your home if you reside in a heavily wooded area.

- Plant fire-resistant, native vegetation and remove any dead or dying trees. Properly prune shrubs, and trim tree branches so they don't extend over a roof or near the chimney. Mow your grass and control the height and spread of ground covering vegetation. Keep plants at least 12 to 18 inches away from the house.
- When putting on a new patio deck, build from fire-resistant materials. On new and existing decks, create fire barriers around the deck base and clear vegetation at least 100 to 300 feet downhill from the deck base.
- Install only burning-brand, exposure rated (Class A, B or C) roof assemblies using materials such as asphalt shingles, slate or clay tile or metal roof coverings.

Additional Guidance from FEMA

Number

[Home Builder's Guide to Construction in Wildfire Zones Technical Fact Sheet Series](#)

FEMA P-737

[Protect Your Property from Fire Fact Sheets](#)

[Rebuilding After a Wildfire Fact sheet](#)

[Wildfire Hazard Mitigation Handbook for Public Facilities, FEMA P-754](#)

Important Disaster Safety & Mitigation Links

FEMA Federal Insurance and Mitigation Administration's [Building Science Branch](#) develops and produces multi-hazard mitigation guidance, provides training on this guidance and works closely with the ICC and other partners to develop disaster-resilient building codes to reduce loss of life and property. Building Science's Mitigation Assessment Teams (MATs) are comprised of expert investigators who deploy into the field post-disaster to assess the damages and make recommendations for future technical guidance and building code improvements. [Download disaster-specific MAT reports and find out how to join a future MAT team.](#)

Other helpful disaster safety and mitigation links include:

[10 Tips for Disaster Safety & Mitigation Flyer](#) (Download and make copies for events)

[FEMA Building Codes Toolkit for Homeowners](#)

Find more building safety resources in the [Catalog of FEMA Wind, Flood, and Wildfire Publications, Training Courses, and Workshops](#), FEMA P-787

Find more earthquake resources in the [Catalog of FEMA Earthquake Resources](#), FEMA P-736B

[Flood Cleanup: Safety and Salvaging Brochure](#)

For more information on mitigating critical facilities such as hospitals, schools, and fire stations, see [FEMA's Risk Management Series for Natural Disasters](#)

[High Wind Safe Rooms](#)

Learn about how building safety and sustainability are linked in [Natural Hazards and Sustainability for Residential Buildings](#), FEMA P-798

[Mold: Tips on Prevention and Control Brochure](#)

[Protect Your Home in a FLASH](#)

[Safety First-Disaster Preparedness: Tips for your Home and Family Brochure](#)

[Watch Disaster Safety "How-To" Videos](#)

National Building Museum Designing for Disaster [Exhibit](#) and [Blog](#)

Simpson Strong-Tie

- [5 Steps to a Stronger Home – Earthquakes](#)

- [5 Steps to a Stronger Home – High Wind](#)

Go to FLASH.org or www.safestronghome.com for more information on how to protect your home.

