

Buyer's Guide to Resilient Homes

How to Strengthen Your Home Against Natural Disasters



FLASH[®]

Strengthening Homes & Safeguarding Families

Welcome to Resilient Homebuying

How would you feel if a natural disaster destroyed your new home, but your neighbor's home survived? Would you wonder what made the difference? Would you think it was just bad luck?

At the Federal Alliance for Safe Homes (FLASH), we call this the “Tale of Two Homes,” and we have seen it unfold countless times. Earthquakes, floods, hurricanes, tornadoes, or wildfires strike communities, and many homes resist the shaking, wind, water, or fire. The families inside these homes are resilient. They bounce back swiftly and get on with their lives. Yet other homes are damaged and destroyed. Those families endure an expensive, long road to recovery. Some never make it back to “normal.”

The most important lesson from this story is that no matter how it turns out, it's not just about luck. When homes survive disasters, it is almost always because someone made responsible decisions about how and where to build. They likely followed a modern building code, and inspectors verified that things were done the right way. But how do you, the buyer, find the right home?



The Buyer's Guide to Resilient Homes has the information you need to identify homes that will still be standing after the disaster.

The guide will take you beyond aesthetics like curb appeal and stainless steel appliances to focus on the risks where you live and how your home should perform when tested by nature. You will learn how to identify inspectors or realtors who can help you determine a home's safety potential. You will discover features and upgrades that make it safer and stronger. We'll even help you understand how insurance provides financial security so you have the resources to recover.

We hope you will find this guide helpful as you begin your search for a new home. We know that having the right information at the right time is key to safeguarding your family from disasters of all kinds. Possibly the most critical time to focus on resilience is when you are buying a home. With the guide in hand, you may not be able to control the weather, but you can take charge of your future by knowing what to expect when disasters strike. You will not only be safer; you will be resilient no matter what you face.





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Will the Home You're Buying Survive the Next Disaster?



Not If, But When

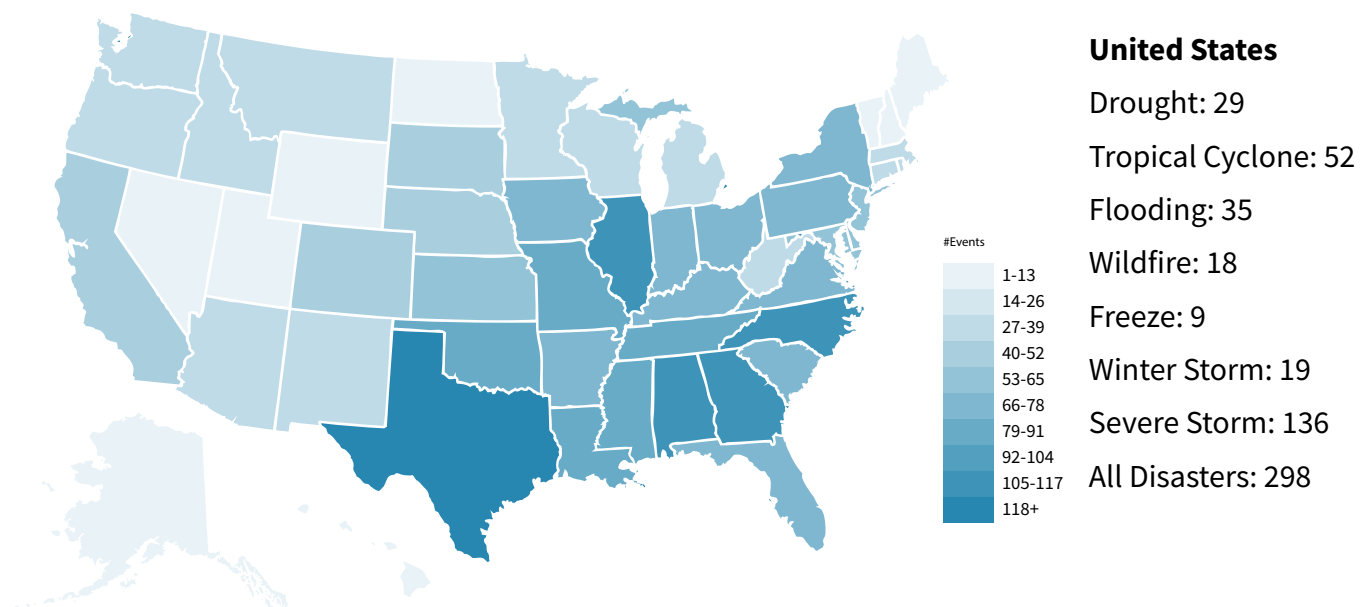
No matter where you're buying, natural disasters will threaten your home

Things to Keep in Mind

- Every state and territory faces one or more natural hazards that bring disaster risk and can vary significantly in severity.
- Disasters disrupt thousands of lives every year and have lasting emotional, financial, and physical impacts.
- Codes are continuously updated to capture new research that improves home safety and performance, so older homes built to out-of-date codes may be more vulnerable because they lack the latest innovation like increased energy efficiency or hurricane resistance.

No community is without some risk from disasters caused by natural hazards (the most common being wind, water, fire, and earthquake). Nationally, disasters disrupt tens of thousands of lives and livelihoods every year, causing lasting emotional, financial, and physical impacts on people and property. That is why it is essential to determine how resilient or vulnerable your potential home and community are **before** deciding where to live.

1980-2021* Billion-Dollar Weather and Climate Disasters (CPI-Adjusted)



Source: NOAA National Centers for Environmental Information

Please note that the map reflects a summation of billion-dollar events for each state affected (i.e., it does not mean that each state shown suffered at least \$1 billion in losses for each event). Also, the map only captures major events, and smaller events still adversely affect people and property.

*as of July 9, 2021

History and science offer insight into where and how disasters may occur, but most still happen without significant warning.

New homes are not necessarily stronger than older homes; there is much more to the story. The quality of the building code, construction methods, products, home location, use of beyond-code standards such as the FORTIFIED Home™ program, and the building inspection effectiveness at the time of construction can all affect home performance.

Fortunately, finding the right location with well-enforced, modern building codes can make a big difference and reduce potential damage. The stronger your home, the faster you and your family will recover after disaster strikes.

This guide will help you ask the right questions and learn more about what your current or future home can handle should the worst happen. After reading this guide, you will understand:

- The performance of your potential home during catastrophic events
- Perils that place your home at risk
- Resilient home improvement options
- Impact on home insurance costs or savings
- The total cost of ownership

Many aspects of homebuying focus on cosmetic features like granite countertops, but looking beyond the aesthetics and buying a well-built home will provide more lasting benefits and value.

The stronger your home, the faster you and your family will recover after disaster strikes.



Why Buy Resilient

Consider the benefits of resilient home construction and location

Things to Keep in Mind

- Two homes can be built identically, but one may have higher risk of disaster because of its specific site or location.
- Decorative features are desirable, but resilience features increase safety, durability, and peace of mind.
- Resilient features provide financial benefits through losses avoided and insurance savings.
- Economic analysis shows that increased consumer awareness of resilience options leads to increased market value for resilient homes.

Some communities may have a higher risk of disasters than others. The next section **“The Home Selection Process”** will give you tools to learn more about the disaster history and potential in locations across the United States.

The relative strong or weak construction of surrounding homes can affect potential damage to your home in a disaster. For example, windborne debris from a weak neighboring home can damage your home.

But even at the neighborhood level, some locations may be more resilient than others. For example, waterfront homes, homes in the wildland-urban interface prone to wildfires, or homes close to earthquake fault lines can have a higher risk of flooding, storm surge, wildfire, or earthquake damage, respectively. But other considerations can mean more or less resilient properties, as well. For instance, one lot may be higher in elevation than the surrounding area, making it less likely to flood than the other lots. Additionally, homes in areas prone to landslides or liquefaction may suffer more damage than homes on stable soil.



Half the challenge is choosing the location; the other half is finding a well-built home. The more vulnerable the location, the more attention must be given to how the home was built.

For example, Californians may be at risk from earthquakes and wildfires. This guide will provide tips on how to search for prospective homes built with earthquake-resistant methods that make it more likely to survive and fire-resistant materials that make it less likely to ignite. The same can be said for homes at risk for flooding. Homes that are elevated higher than floodwaters can protect people and belongings.

After determining the natural disasters in the area where you are house hunting, you can identify ideal construction solutions. For example, homes in tornado-prone areas may include a tornado shelter or tornado safe room. If the shelter or safe room is constructed consistent with FEMA guidance or tested and approved to meet the International Code Council 500 standard, it can provide near-absolute protection in tornadoes up to 250 miles-per-hour. Another example is the use of impact-resistant garage doors in hurricane-prone areas, as the garage door is typically the first component to fail during severe winds. Homes in flood-prone areas should be constructed above the expected flooding level. This guide will identify many of those construction solutions.

No matter where you buy, it is essential to consider homes built or upgraded using the latest model building codes and standards as codes are continually improved with research and scientific insights. Codes provide life safety and offer construction methods that address disasters like earthquakes, floods, hurricanes, wildfires, and even winter freeze.

Builders and communities that adopt and enforce current model codes recognize that a small upfront investment in better building methods provides homeowners with greater long-term value because the actual cost of homeownership is much more than the purchase price.

When calculating the true cost, consider energy efficiency, durability to avoid frequent or unnecessary maintenance, and disaster-resistant features that prevent losses from severe weather and earthquakes. Resilience features can make a home more desirable to prospective buyers and increase your home's real estate market value as the economic case for resilience is not just about the losses you avoid or insurance savings you enjoy. A study by economist Kevin Simmons found that homes with tornado safe rooms in Oklahoma real estate markets enjoyed a sales price increase of 3.5% or an average of \$4,200.

Become a Resilient-Smart Detective

Consider resilience as you begin the homebuying process

Things to Keep in Mind

- Check the building code followed (if any) when the home was constructed.
- Disclosure regulations vary by state, and some states don't require disclosure of information about all hazard risks.
- Professionals like builders, realtors, and even inspectors may not be aware of resilience options, so it is important for buyers to make it a priority.
- Find out if the neighborhood or home has experienced damage. Was it caused by a disaster?

Homes should be constructed with disaster risk in mind, and buyers can compare safety features, expected performance, and ratings just as they do when purchasing a car.

Can the roof withstand high winds?

Is the decking material noncombustible?

Will the walls resist the shaking of an earthquake?

Evaluating your home's potential to survive weather events will help protect what's most important in your life: your family, your possessions, and your home.

This guide will help you identify and evaluate the features that affect the risk of both a home's location and its construction. Using the checklists for various homes you are considering allows you to compare which one is more resilient than others. Combined with other home choice considerations important to your family, this helps you make smarter decisions.



For the same price, do you buy the larger home at a lower elevation near the river, or the stronger and slightly smaller elevated home?

You can become better aware of the upfront risks and costs (such as insurance) and later improvements you may need to budget for, and you can enjoy increased safety and peace of mind, as well as potentially lower insurance premiums, annual and future home operating and repair expenses, and upgrade costs.

Start your homebuying journey by finding the right team. If you are working with a realtor, express your interest in finding resilient properties and ask about their ability to help you. Consider hiring an inspector. If you have a family member or friend familiar with home construction, ask them to help you.

The adage “buyer beware” is the best rule of thumb to follow when homebuying. Professionals in the homebuying process, including realtors, are not routinely trained or tested on resilience factors, and they may not understand the information necessary to help you evaluate home resilience.

Begin with the basic resilience checklist (Appendix I) to ask questions regarding each home you consider purchasing. Information disclosure regulations vary from state to state and may not reveal all hazard risks. For example, some states require requirements of past flood damage; however, many do not.

Tip: States with realtor disclosure requirements include California and Texas



Some of the critical questions outlined in the basic resilience checklist may include:

1. Has this home experienced any insurance claim caused by common (water leak) or disaster-related (flooding, etc.) losses?
2. If repairs were necessary following the loss, what was the cost of the repairs?
3. Have the current homeowners had difficulty securing insurance for the home due to hazards like sinkholes?

If the answer to any of these types of questions is yes, request documentation of the repairs made along with the name of the repair contractor or company.

Modern building codes ensure that your home is built using the latest practices and standards to protect against disasters like earthquakes, floods, hurricanes, tornadoes, and wildfires.



Visit [Inspect2Protect.org](https://www.inspect2protect.org) to find the current building codes adopted in your local area, disaster history for your community, historical code information, and potential upgrade options to make your home safer and stronger.

