

# REDUCING EARTHQUAKE RISK

The more you know, the better you can plan for what's ahead.



#### **Be proactive**

Many think the majority of earthquakes occur in California, but if you live anywhere west or just east of the Rockies, you live in an earthquake zone. Do you live along the Mississippi River in the New Madrid region, well, that's an earthquake zone. Charleston, S.C.? Yes. Alaska? Absolutely. There's even a fault line running under New York City.

The thought of your life being changed in an instant can be a frightening one, no matter where you are located. You don't have to lose your home and possessions. You can take steps to be prepared. It's never too early; you can take several basic steps right now to protect your family and your home from disaster.

### **Before an earthquake**

While nothing can be done to make a dwelling completely quake-resistant, you can improve the odds of your home surviving an earthquake by taking these precautions. Earthquakes strike without warning, so take these additional steps to protect yourself and your family as fully as possible:

- Teach everyone to duck or drop to the floor, take cover under a desk or table and hold on to it when an earthquake strikes. Remember the phrase: Duck, cover, and hold.
- Become familiar with your community's disaster preparedness plans and create a family plan. Identify escape routes from your home and neighborhood and designate an emergency meeting place for the family to reunite if you become separated. Also establish a contact point to communicate with concerned relatives.
- Make certain all adult and teenage members of the family know where your gas, electric and water main shutoff controls are and how to turn them off it there is a leak or electrical short. Keep any necessary wrenches close by.
- Put together an emergency kit that includes a three-day supply of drinking water and food you don't have to refrigerate or cook; first aid supplies; a portable NOAA weather radio; a wrench and other basic tools; a flashlight; work gloves; emergency cooking equipment; clothing; blankets; baby items; prescription medications; extra car and house keys; extra eyeglasses; credit cards and cash; important documents, including insurance policies.

# **During an earthquake**

If you are indoors when an earthquake strikes, stay there. Move away from windows, skylights, doors and things that could fall. Duck, cover and hold until the shaking stops.

- If you are outdoors, move quickly and safely into the open, away from electrical lines, trees and buildings. Drop to the ground and wait for the shaking to stop.
- If you are driving, carefully and slowly bring your vehicle to a stop at the side of the road away from traffic. Do not stop on or under bridges, under power lines or near roadway signs that might fall. Once the shaking has stopped, you can continue driving, but watch carefully for possible damage to the roadway.



# Preparing the inside of your dwelling

- Anchor bookcases and filing cabinets to nearby walls.
- Install latches on drawers and cabinet doors to keep contents from spilling.
- Install ledge barriers on shelves, place heavy items on lower shelves, and secure large, heavy items and breakables directly to shelves to keep them from falling.
- Use closed screw-eyes and wire to securely attach pictures and mirrors to the walls.
- Attach computers and small appliances to desks, tables or countertops.
- Secure ceiling lights, suspended ceilings and other hanging items such as chandeliers and plants to the permanent structure of your house.
- Apply safety film to windows and glass doors.
- Anchor large appliances to walls using safety cables or straps. Lock the rollers of any large appliances or pieces of furniture.
- Secure water heater(s) to nearby walls.
- Fit all gas appliances with flexible connections and/or a breakaway gas shut-off device, or install a main gas shut-off device. (Check your local building codes to determine whether you may install flexible connectors yourself or whether a professional must install them.)



# Preparing the actual structure

An earthquake puts your home's structure to the test: it must absorb the earthquake's energy and provide a stable path to transfer these forces back into the ground. Your home is more likely to pass this test when it is properly tied together, meaning the roof is attached tightly to the walls, the walls are fastened to each other and, finally, the walls are braced and anchored to a strong foundation.

If structural elements of your home need reinforcing, some of the most important and common retrofits include:

- Adding anchor bolts or steel plates between your home and its foundation.
- Bracing the inside of your home's cripple wall the short wood-stud wall between the top of the foundation wall and the first floor—with sheathing.
- Bracing unreinforced chimneys, masonry and concrete walls and foundations.

It's important to note that while you can secure appliances, furniture and keepsakes yourself, work involving your home's structure tends to be much more complex, and usually requires the expertise of a registered design professional, such as an architect or engineer, or a licensed building contractor. Also, make sure to check with local building officials before attempting structural changes to your home to be sure the changes comply with local building codes. A benefit of upgrading the structure of your house is experts agree that structures built to meet or exceed current model building codes have a much better chance of surviving an earthquake.

# Make the smart choice

As mentioned earlier, earthquakes can occur without warning, with sometimes devastating results. The best way to prevent becoming a part of these statistics is to prepare as much as you can before one occurs. Doing so will improve the odds of your house remaining standing, as well as increase the safety level for you and your family. While taking these measures does not guarantee your safety, they can go a long way in reducing the risk you face.

More information on earthquake preparedness can be found at farmers.com/earthquake.html



If you are affected by an earthquake or other natural disaster, you should report any property damage to your insurance agent or company representative immediately. If it is safe to do so, make temporary repairs to prevent further damage. For information about filing an insurance claim after a natural disaster, contact your insurance agent.



The information provided is general in nature and was obtained from various sources. It provides examples of safety precautions you can consider to help prepare yourself, others and your personal property for natural disasters. Not every acceptable precaution or loss control procedure is contained in this material. Please recognize that a particular precaution may not be appropriate or effective in every circumstance. We encourage you to use your own good judgment about what's appropriate. We do not endorse, recommend, or guaranty any products and the information provided is not intended to replace any manuals or other instructions provided by the manufacturer. The information contained herein does not affect any policy contract . Whether a particular loss is covered depends on the specific facts and the provisions, exclusions and limits of your policy. Although we believe the information to be reliable and accurate we do not warrant its accuracy or reliability nor do we make any guarantee of results from its use nor do we assume any liability in connection with either the information or the loss control suggestions made. When appropriate, you should consult a licensed qualified professional to perform various loss control measures.