

Protecting Your Property from Earthquakes

Desktop Computers and Appliances

Are You at Risk?

If you aren't sure whether your house is at risk from earthquakes, check with your local building official, city engineer, or planning and zoning administrator. They can tell you whether you are in an earth-quake hazard area. Also, they usually can tell you how to protect yourself and your house and property from earthquakes.

What You Can Do

Earthquake protection can involve a variety of changes to your house and property -- changes that can vary in complexity and cost. You may be able to make some types of changes yourself. But complicated or large-scale changes and those that affect the structure of your house or its electrical wiring and plumbing should be carried out only by a professional contractor licensed to work in your state, county, or city. One example of earthquake protection is restraining personal computers and other small desktop appliances. This is something that many homeowners can probably do on their own.

Restrain Desktop Computers and Appliances

The tremors caused by even minor earthquakes can easily move personal computer systems, stereo systems, television sets, and other small appliances that typically sit on desks, tables, and countertops. If they fall, they can be damaged beyond repair.

As shown in the figure, you can protect desktop computers and other small appliances by restraining them in a variety of ways. Some methods, such as using hook-and-loop material (Velcro for example), require no tools. Others, which include using chain, cables, or elastic cord ("bungee" cords for example), will usually require simple hand tools.

Tips

Keep these points in mind when you restrain desktop computers and appliances:

- Make sure that the desk or table the appliance sits on is not so light that it can be easily overturned. If it is, and you can't move the appliance to another location, consider anchoring the desk or table to the floor or wall.
- You can anchor the ends of chains, cables, or elastic cords to either the wall or the surface of the desk, table, or counter using eye-hooks, rings, screws and washers, or other types of mounts.
- If you want to use a wall-anchored chain, cable, or cord, attach it to a closed eye-hook screwed into the wall or to a wall mount (such as a ring or plate) attached with screws. Make sure the eye-hook or screws are long enough to penetrate not just the wall but the studs behind it as well.

Estimated Cost

Restraining a single desktop computer or appliance with one of the methods described will cost you about \$2 to \$10, depending on the amount of hardware required. Using hook-and-loop material will be the cheapest method. Using chain or cable will be the most expensive method but may be necessary for heavy items.

Other Sources of Information

Seismic Retrofit Training for Building Contractors and Building Inspectors: Participant Handbook, FEMA, 1995

Reducing the Risks of Nonstructural Earthquake Damage: A Practical Guide, FEMA-74, 1994

Protecting Your Home and Business from Nonstructural Earthquake Damage, FEMA, 1994

To obtain copies of these and other FEMA documents, call FEMA Publications at **1-800-480-2520**. Information is also available on the World Wide Web at <http://www.fema.gov>.

