

Restrain Desktop Computers and Appliances



FEMA

PROTECTING YOUR PROPERTY FROM EARTHQUAKES

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.

You can protect desktop computers and other small appliances by restraining them in a variety of ways. The figure shows three different ways. Methods such as using hook-and-loop material (Velcro, for example) require no tools. Others, which include using chains, cables, flexible nylon or elastic cords ("bungee" cords, for example), will usually require simple hand tools.

BENEFITS OF UTILIZING THIS MITIGATION STRATEGY

- Helps to prevent damage to computers and appliances
- Helps to prevent injuries to occupants

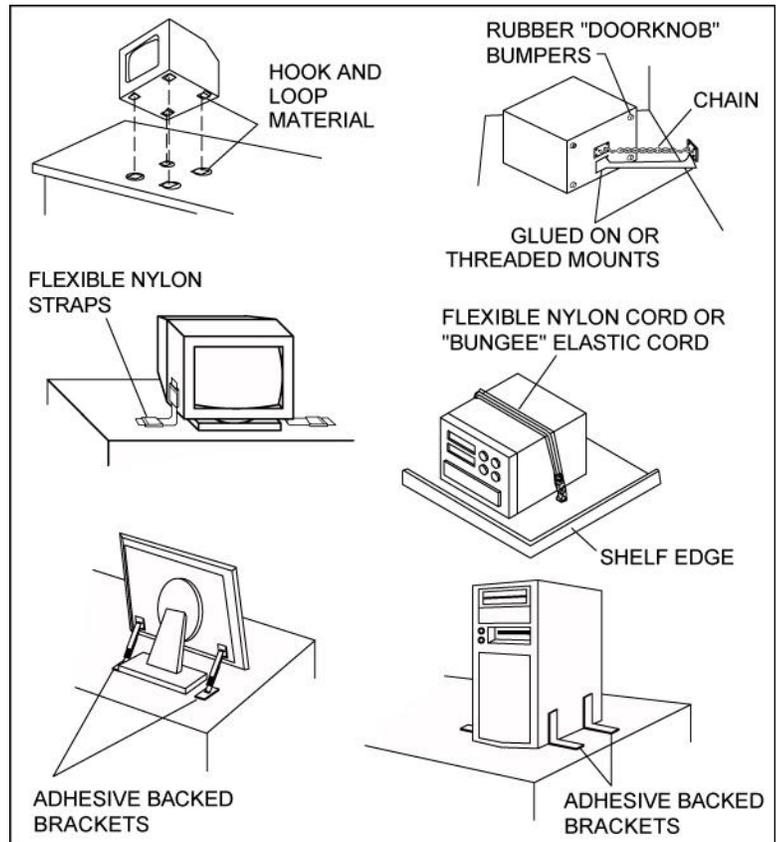
TIPS

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 only the wall but also the studs behind it as well.

ESTIMATED COST

Restraining a single desktop computer or appliance with one of the methods described will cost about \$50, depending on the amount of hardware required. Using hook-and-loop material would be the least expensive method. Using chains or cables would be the most expensive method, but may be necessary for heavy items.



OTHER SOURCES OF INFORMATION

FEMA 74, *Reducing the Risks of Nonstructural Earthquake Damage: A Practical Guide*, Third Edition, September 1994, <http://www.fema.gov/library/viewRecord.do?id=1574>.

FEMA 232, *Homebuilders' Guide to Earthquake-Resistant Design and Construction*, June 2006, <http://www.fema.gov/library/viewRecord.do?id=2103>.

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