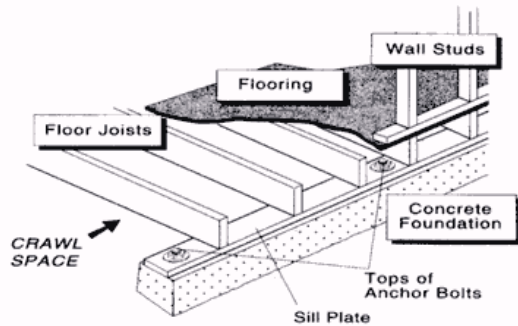




Protecting Your Home from Earthquake Damage Check-Ups the Home Owner can Make

Foundation Anchor Bolts

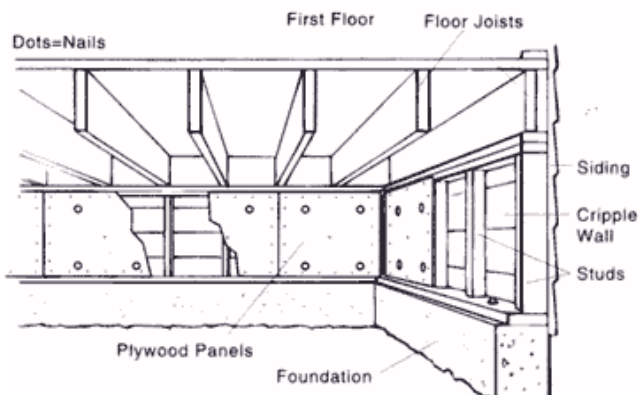


Bolting your home to its foundation is one of the most effective ways to avoid major structural damage in an earthquake. By looking under your house with a flashlight you can easily check whether your house is securely fastened to its foundation.

The wood 2x4 or 2x6 that rests directly on the foundation is called the "mud sill." Until the 1950s, homebuilders often did not bolt the mudsills to the foundation. This creates a serious structural weakness that can allow your home to slide off its foundation during an earthquake. The mudsill should be bolted at four to six foot intervals (depending upon home design), and a bolt should be located within one foot of every joint or step in the mudsill, but no closer than nine inches to the end of the board.

If the mudsill is not bolted, or inadequately bolted, a qualified licensed contractor can readily make a retrofit.

Foundation Support Wall Bracing



Once under the house, check to make sure support walls are braced with plywood to resist motion. Even if the walls have cross bracing, they are not strong enough for earthquakes unless you add plywood. These support walls, also called cripple or pony walls, are the short sections of walls between the floors of your home and the foundation.

If the support walls are not braced, or inadequately braced, a qualified licensed contractor can readily make a retrofit.

Note: Not all foundation systems use foundation support walls. In certain cases the wooden mudsill plate may be attached directly to the foundation.



Protecting Your Home from Earthquake Damage (Cont'd)

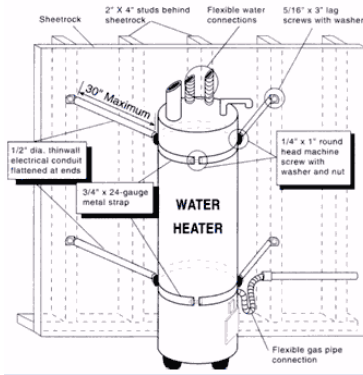
Faulty Materials In The Concrete And The Wood Framing



The foundation is a common area of structural weakness, so check your foundation to make sure it's in good condition. Sometimes the concrete used in foundations is too porous and crumbly to provide adequate strength. If so, your home is still subject to earthquake damage, even if you've bolted it down and installed plywood on the cripple walls.

Do you see any obvious evidence in the wood of dry rot or insect damage? If so, you will need to remove and replace the damaged wood. It's a good idea to hire a structural pest control inspector to look for damage not easily seen except by a trained eye.

Water Heater Strapping



If a water heater falls, the broken gas line or electrical connections may cause a fire as well as water damage. To minimize the risk, strap your water heater to the wall with water heater straps specifically designed for the purpose and connect them to nearby wall studs, making sure to follow all installation instructions. Make sure the bracing is attached to wood studs and not just attached to the sheetrock! Check with your local building authority for the specific requirements in your local area.

If a water heater falls during an earthquake, it could break a gas line and start a fire. To minimize this risk from your water heater, add flexible connections to both the gas and water lines to reduce the danger from fire or a water leak.

Gas, Electricity, and Water Shut Off Valves - Working and Accessible

Fire poses a major danger to your home and possessions after an earthquake. Broken water pipes also can cause significant damage. Make sure you know how to turn off the gas, electricity and water if your home is damaged. If advised by your local utility, shut off electric circuits at the fuse panel and gas service at the meter.

Flexible Connectors Installed Where Gas Lines Meet Appliances

Flexible connectors prevent gas lines from breaking and causing fires and should be installed at all gas appliances (furnace, stove, dryer, water heater, etc.), with an approved isolation valve immediately upstream of the flexible connector.