Protecting Your Home

Bolt Your House to It’s Foundation

Every 3 to 4 feet along the foundation, drill a hole using a right-angle drill with a 1/2-inch bit (A), blow the concrete powder out of the hole with a small piece of flexible tubing (B), and hammer in an expansion bolt, 1/2-inch in diameter and about 5-1/2-inches in length (C). Tighten the nut on the expansion bolt.

Reinforcing the “cripple” walls between the foundation and first floor of an older, wood-frame house can significantly reduce earthquake damage. Nail 2 by 4 inch blocks of wood to the mud sill as needed (A). Cut 1/2-inch plywood to fit the inner side of the wall (B). Fasten plywood along all edges and to each stud using 8d nails spaced 3 inches apart.

Wrap Your Hot Water Heater

Broken water heaters were a major reason so many houses were destroyed in the 1994 Northridge earthquake.

Wrap a 1-1/2 inch-wide, 16-gauge-thick metal strap (A) around the top of the water heater and bolt the ends together. Do the same about 1/3 of the way up the side of the water heater.

Take four lengths of EMT electrical conduit, each no longer than 30 inches. Flatten the ends. Bolt one end to the metal strap as shown (B). Screw the other end to a 2-inch by 4-inch stud in the wall using a 5/16-inch by 3-inch lag screw.

Be sure a flexible pipe (C) is used to connect the gas supply to the heater.

Be Prepared for the Big One:
Other Actions You Can Take to Lower Your Risk of Fire Damage

- Enclose the underside of balconies and above-ground decks with fire resistant materials.
- Install spark arrestors on chimneys.
- Install smoke alarms and break-away bars on windows.
- Install only Class A roof; no wood shakes.
- Maintain a firebreak around your home.
- Bolt tall bookcases and other furniture to the walls; place bulky books and heavy objects on lower shelves.
- Place beds away from high heavy objects and away from large windows or mirrors.
- Install cabinet latches to prevent objects from being hurled to the floor.