



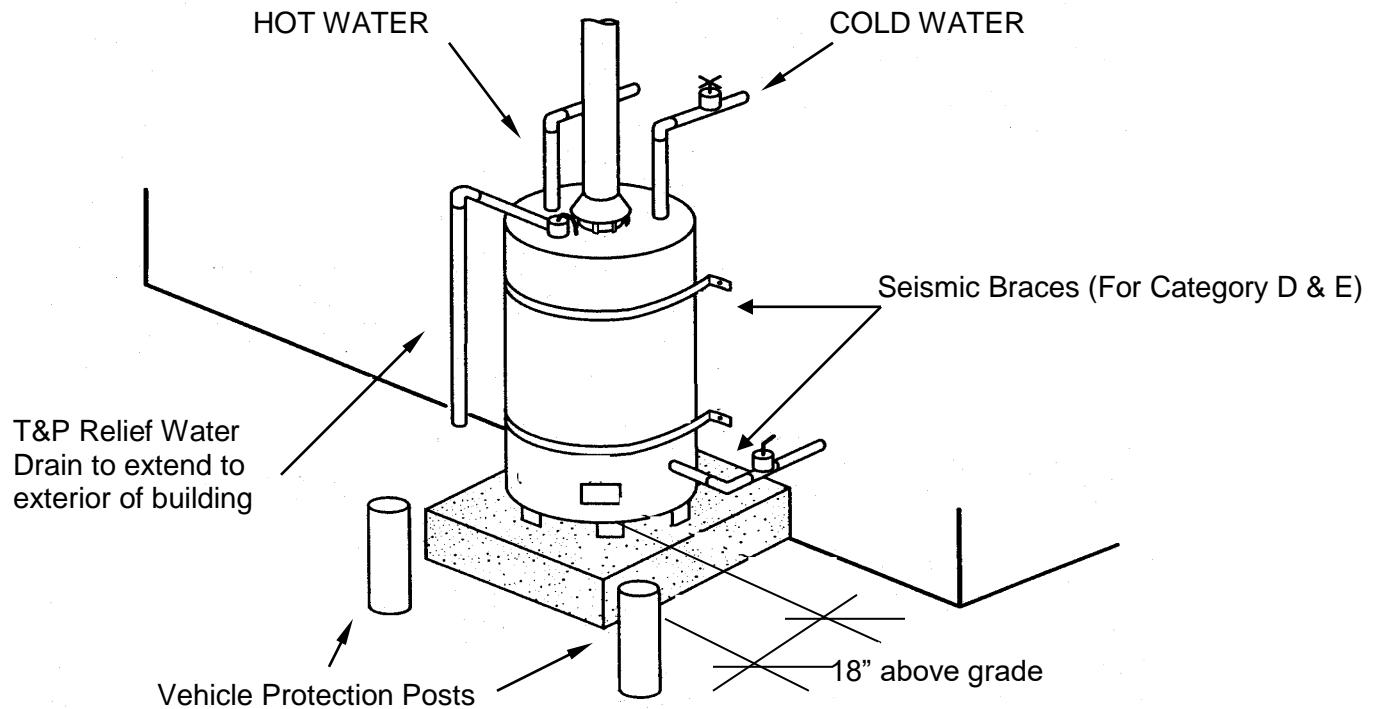
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# County of Riverside

TRANSPORTATION AND LAND MANAGEMENT AGENCY

## Building and Safety Department

### Water Heater Strapping



#### Section 508.2 California Plumbing Code

Strapping your water heater and making sure it is fitted with a flexible gas supply line will greatly reduce the danger of a fire or explosion from a gas leak after an earthquake. The water contained within your water heater can also be a vital source of drinking water in an emergency. The code specifies all new and replacement water heaters shall be anchored to resist horizontal displacement due to earthquake motion. Strapping shall be at points within the upper one-third (1/3) and lower one-third (1/3) of its vertical dimensions. At the lower point, a minimum distance of four (4) inches shall be maintained above the controls with the strapping. Water heater(s) with a capacity of not more than 120 gallons can be strapped in accordance with the generic manufacturer's installation instructions or pre-engineered strapping kit sold in most building and plumbing supply stores.

#### **INSTALLATION CHECKLIST**

1. Seismic straps shall be installed per the manufactures specifications or pre-engineered instructions.
2. The pressure relief drain shall be of galvanized steel, hard-drawn copper piping or CPVC and shall extend to the outside of the building, with the end of the pipe not more than two (2) feet nor less than six (6) inches above the ground.
3. Hot water piping shall be insulated with a minimum R-4 the first five (5) feet from the water heater.
4. Install corrosion resistant watertight pan for water heater(s), when located in attic, floor-ceiling and floor-subfloor assemblies. Install a minimum  $\frac{3}{4}$  inch drain to the outside.
5. New gas piping shall be installed with approved/listed materials and air pressure tested for ten (10) minutes at no less than 1-1/2 times the working pressure, but not less than 3 psi.
6. The venting system shall be properly installed and adequate combustion air must be provided.