

Chapter 6: Plumbing

The Washington State Energy Code (WSEC) sets standards that minimize heat loss and conserve water (see Figure 6-1).

Plumbing Requirements

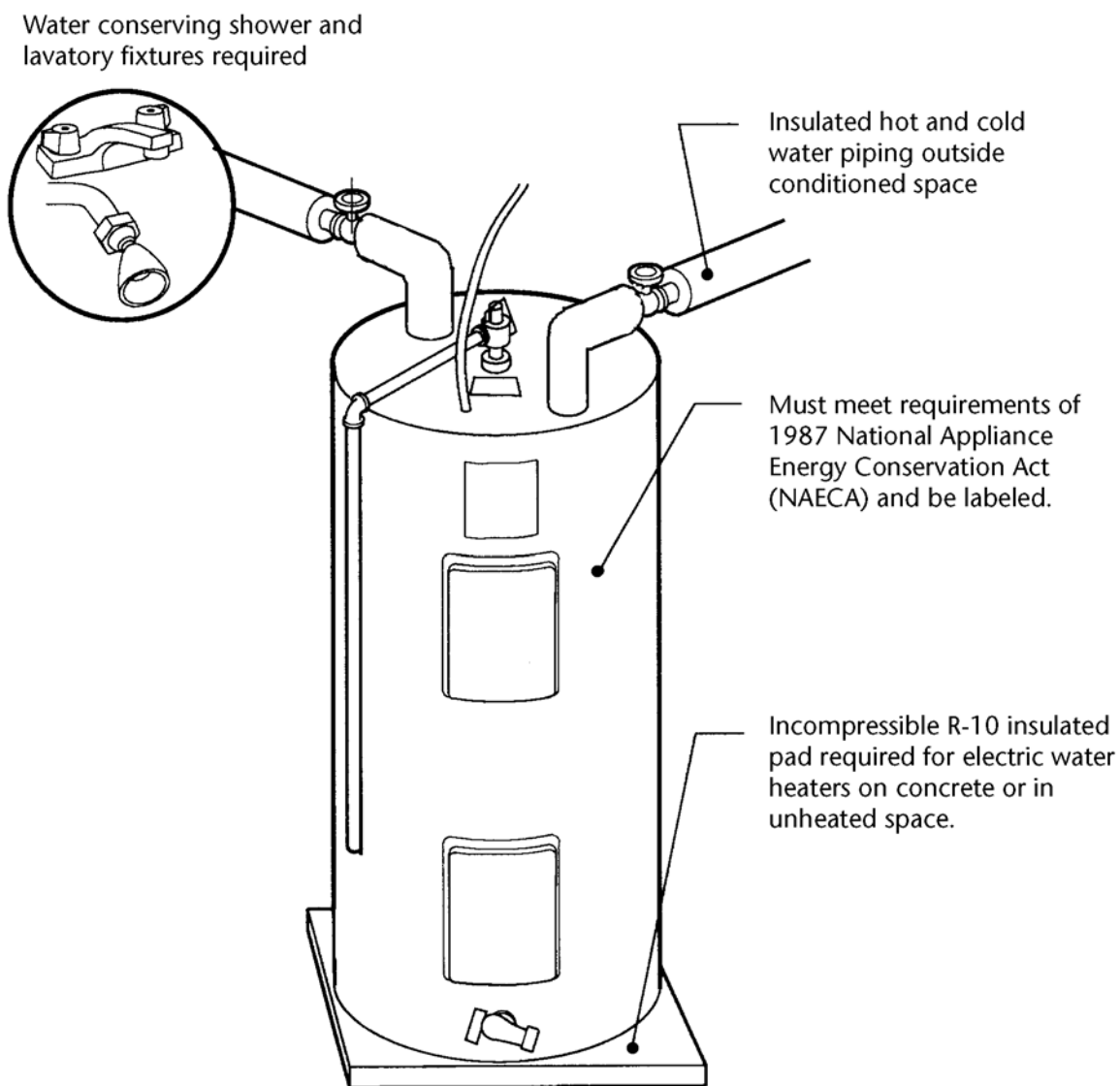
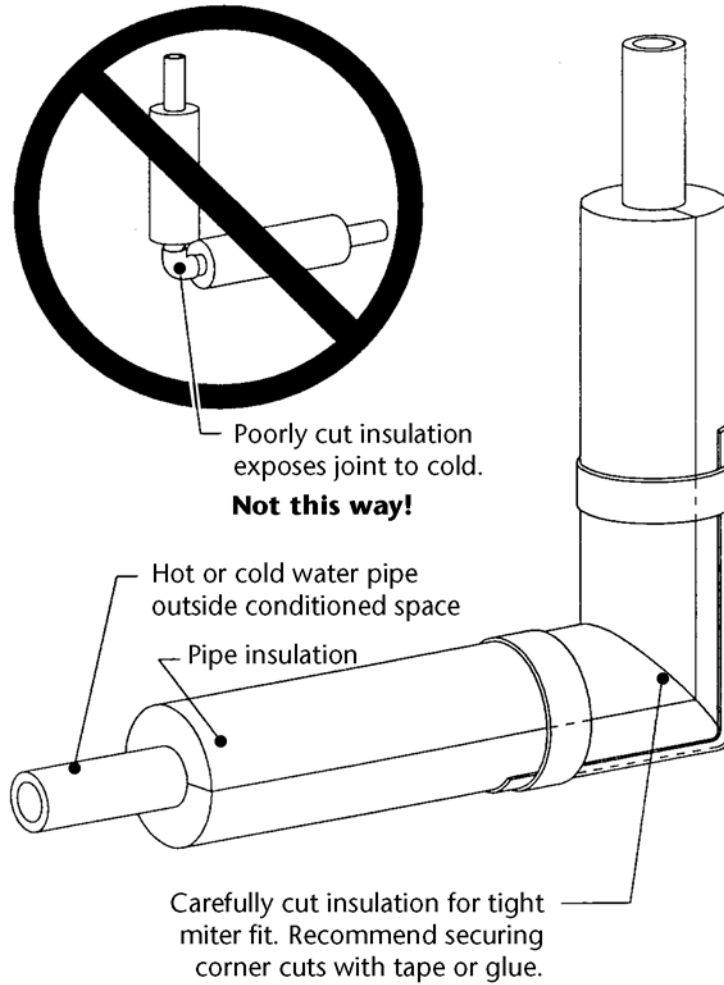


Figure 6-1

- [504.8.1] **Water Conservation.** Flow rates for shower heads and lavatories are limited by the Washington Administrative Code. These flow rates are set at 2.5 gpm or less for shower heads and 1.6 gpm for lavatories.
- [504.2.1] **Water Heaters.** All water heaters must meet the performance efficiency requirements of the 1987 National Appliance Energy Conservation Act (NAECA). All currently manufactured units should meet this standard. Also:
- [504.3] Residential water heaters must be set to a maximum 120°F.
- [504.4] Each water heater must have a separate shut-off switch or valve.
- All electric water heaters in unheated spaces or on concrete floors must be placed on an incompressible insulated surface with minimal thermal resistance R-10.
- [504.2.1] Storage water heaters used for combination space heating and water heating must meet the efficiencies listed in Table 504.2.1.
- [503.11] **Pipe insulation.** Hot and cold water pipes outside the conditioned envelope of the building must be insulated to the level specified in WSEC Table 5-12 (R-3.6 for < 2" pipe, R-5.4 for > 2").
- Swimming Pools.** Heated swimming pools must meet the following requirements:
- [504.5.2] Have a pool cover approved by the Building Official.
- [504.5.1] All pool heaters must have an accessible ON/OFF switch to shut off the heater without adjusting the thermostat.
- [504.5.1] Pool thermostats must be adjustable to a minimum 65°F setting.

Pipe Insulation



Note: Polyethylene foam will provide approximately R-3.6 per inch of thickness.

Figure 6-2

