



Southwest Washington Chapter of ICC

This Criteria is accepted as meeting the minimum standard of construction in conformance with 2006 UPC / WAC 51-56 requirements and is accepted in the following regional jurisdictions

WATER HEATER (Electric or Gas) REPLACEMENT GUIDELINES

- 1. Plumbing Code:** Uniform Plumbing Code, '06 Edition as amended. A Plumbing permit is required for replacement of existing water heater or addition of a new water heater. New piping shall be tested and approved before placing new piping into service.
- 2. Fuel source:** Gas (Natural Gas or Propane) requires permit under the International Fuel Gas Code, '06 Edition for new service or re-piping of existing services for commercial and International Residential Code for residential gas fired water heaters.
- 3. Installation Manuals for Commercial or Residential installation:** Provide a copy of the equipment installation manuals for the water heater and venting components. This is mandatory for commercial installations.
- 4. General water heater rules:** Consult Installation Manual and Codes for complete regulations pertaining to your permitted activity:
 - a. All storage type heater tank heaters shall have a minimum of (2) seismic straps, located at the upper and lower 1/3 of tank.
 - b. Tanks on wood floors shall rest in drain pans.
 - c. All water heaters shall possess a pressure and temperature-regulating valve piped to the outside of the building or to an approved location. Piping shall drain to a minimum slope of 1/4" per foot.
 - d. Full way shut off valves shall be employed at the heater at cold side.
 - e. Water heaters (electric only) in garages or basements or resting on concrete shall rest on an R10 insulating pad. Certain commercial type heaters may be exempted.

- f. Water heaters in garages including electrical shall be elevated so that the bottom contactor or spark or flame-producing device is at least 18” above the surface of the floor unless listed as flammable vapor ignition resistant.
- g. Freestanding heaters in garages where in the path of vehicles shall be protected by 3”x30” steel pipe bollards attached to the floor.
- h. Combustion air shall be provided for gas combustion heaters as recommended by the manufacturer and in conformance with IFGC. See codes for limitations on location and placement of heater units.
- i. Combustion products shall be vented according to the manufacturer’s recommended installation instructions for the heater utilizing appropriately listed venting components installed in keeping with their listings.

5. Pressure protection:

- a. The UPC requires regulation of domestic water pressure to no more than 80 psi. Provide pressure regulator if supply pressure exceeds 80 psi. Contact water purveyor for additional information.
- b. If supply is checked or has a check valve or backflow protection device at the service meter, provide a thermal expansion control tank at the water heater adjusted to supply pressure.

6. Piping:

- a. Only approved Listed and Labeled materials with IAPMO logo shall be used.
- b. Follow manufacturer’s installation instructions.
- c. Plastic piping shall not be installed within 18” of water heaters.
- d. Provide dielectric risers for connection of dissimilar metal piping e.g. copper to galvanized steel pipe.

7. WARNING: Follow heater instruction for recommended temperature settings to avoid scalding. Maximum temperature is 120 degrees F.

8. Inspection and approval: All installations are subject to inspection and testing for final approval.