

RESIDENTIAL REQUIREMENTS FOR REPLACING A WATER HEATER

- ◆ A plumbing permit is required to replace a water heater.
- ◆ Water heaters installed in residential garages shall be elevated on platforms so that the flame or burner is a minimum of 18 inches above the floor unless listed as a flammable vapor ignition resistant burner. (CPC 507.13)
- ◆ Water heaters shall be anchored or strapped to resist earthquake forces. Strapping shall be at upper 1/3 of tank and at lower 1/3 of tank, a minimum of 4" above the controls. (CPC 507.2)
- ◆ Water heaters shall be provided with a combination temperature and pressure relief valve piped to the exterior or other approved location. (CPC 608)
- ◆ Provide minimum 1 inch clearance from double wall flue and 6 inches clearance from single wall flue to combustibles. Single wall pipe is not approved for use in an attic. (CPC 509.7)
- ◆ Provide minimum combustion air for water heater when it is located in a confined space (upper and lower vents with a minimum of 100 square inches required equally divided top and bottom). (CPC 506)
- ◆ Drainage Pan: Where a water heater is located in an attic, attic-ceiling assembly, floor-ceiling, or floor subfloor assembly where damage results from a leaking water heater, a watertight pan of corrosion-resistant materials shall be installed beneath the water heater with not less than $\frac{3}{4}$ of an inch (20 mm) diameter drain to an approved location. (CPC 507.5)
- ◆ An expansion tank or other approved devices is required to protect the plumbing system from thermal expansion when a pressure regulating valve is part of the plumbing system. (CPC 608)
- ◆ Sediment Trap: Shall be installed downstream of the appliance shutoff valve and before the flex connector.(CPC 1210.8 &1212.8)
- ◆ Water heater installations in bedrooms and bathrooms shall be in accordance with one of the following (NFPA 54:10.28.1) (CPC 504):
 - ◇ Fuel-burning water heaters shall be permitted to be installed in a closet located in the bedroom or bathroom provided the closet is equipped with a listed, gasketed door assembly and a listed self-closing device. The self-closing door assembly shall meet the requirements of Section 504.1.1. The door assembly shall be installed with a threshold and bottom door seal and shall meet the requirements of Section 504.1.2. Combustion air for such installations shall be obtained from the outdoors in accordance with Section 506.4. The closet shall be for the exclusive use of the water heater.
 - ◇ Water heater shall be of the direct vent type. (NFPA 54:10.28.1(2)) (CPC 504)
- ◆ Refer to the 2016 "California Plumbing Code" for specific requirements.

Minimum DHW Efficiencies

Federally Regulated Water Heaters – Minimum Efficiencies
From Table 5.1 of the 2016 Residential Compliance Manual

Type	Size	Energy Factor (EF) Effective April 16, 2015
Small Gas Storage (≤55 gallons)	≤75 Btuh:	0.675-(0.0015*V)
Small Gas Storage (>55 gallons)	≤75 Btuh:	0.8012 – (0.00078*V)
Small Gas Instantaneous	≤200 kBtuh:	0.82
Large Gas Instantaneous	(≥4,000 Btu/hr/gal)	0.80

I agree to comply with these requirements as well as any other California Building Code requirements.

Applicant Signature

Date

INSPECTION INFORMATION

- ◆ Call the inspection line (625-5136) prior to 6:00 am for same day inspection.
- ◆ Gas pressure test is required when over 6 feet of new piping is added or replaced.
- ◆ Flue or vent inspection is required before covering work.
- ◆ Final inspection is required when the job is complete.

All work subject to field inspection.