



# RESIDENTIAL WATER HEAT INSTALLATION GUIDELINE

[www.LasVegasNevada.gov/BuildingPermits](http://www.LasVegasNevada.gov/BuildingPermits)

Phone: (702) 229-6251

A permit is required to install, move, remove, or replace any water heater. Obtain the permit from the City of Las Vegas Building Department before commencement of any work.

A homeowner may obtain a permit themselves for the water heater if the home is their primary residence under their ownership. A contractor is required for rental properties or secondary homes.

The following requirements are referenced from the 2018 Uniform Plumbing Code, 2018 International Energy Conservation Code, and the 2017 National Electrical Code. This is a summary and does not contain all code requirements.

- Gas water heaters installed in garages shall be elevated 18" above the floor in garages.
- A drainage pan shall be installed and piped to a drain or to the exterior of the building if the water heater is installed at other than the 1st level of the residence or building.
- The temperature and pressure valve shall be plumbed with a drain pipe to the exterior of the residence or by means of an air gap into the drainage system. The end of the drain pipe shall be not less than 6 inches above the ground and pointing downwards.
- 2 seismic straps are required to be installed around the water heater and attached to the framing. Strapping shall be at points within the upper one third and lower one third of the water heaters vertical dimensions. At the lower strap, maintain a clearance of 4 inches above the controls.
- Shut off valves are required and must be accessible. Gas shutoff valves shall be installed within 6 feet of the appliance it serves and ahead of the gas connector.
- Where a sediment trap is not already a part of the water heater, a sediment trap shall be installed downstream of the shutoff valve as close to the inlet of the water heater as practical during installation. See figure 12-1 for a method of installation.
- All hot water piping in unconditioned spaces including under slab shall be insulated with a minimum R-3 pipe insulation.
- Water pipe installed in or attached to a building shall be bonded (electrically tied) to the electrical service equipment panel, grounded conductor of the service, the grounding electrode conductor, or to one or more of the grounding electrodes used. For replacement of existing water heater, the current bonding must be maintained.
- If an electric water heater is being installed, provide an electrical disconnect within site of the water heater or is lockable.

A final inspection is required after all work is completed. The inspection shall be requested by the permit holder at least one day prior to the day of inspection. The telephone number to call in the inspection is at the top of the inspection permit. Call 229-4677 for the inspection or 229-6914 if you require assistance. Inspections can also be scheduled on our website at [LasVegasNevada.Gov/ScheduleInspection](http://LasVegasNevada.Gov/ScheduleInspection).

**Figure 12-1 Sediment Trap**

