



TANKLESS WATER HEATERS

This information is intended to provide general guidance on the installation of Tankless Gas Water Heaters in R-3 occupancies. Installation shall comply with all of the provisions as required by the current California Plumbing Code (CPC), the California Energy Code (CEC), and the California Mechanical Code (CMC). This sheet summarizes some of the key information there in and is not meant to replace these codes.

Napa County **does not** consider a tankless water heater as a direct replacement for a Storage Tank type heater. The installed tankless water heater must meet the required minimum energy efficiency standards. Not all tankless units meet those standards. Existing gas Storage Tank water heaters can be replaced by tankless units provided the Energy Factor of the tankless unit is 0.80 or higher.

Gas Line

You **may not** assume that the fuel gas system that already exists will be adequate for a tankless water heater (CPC507.18) It is common for tankless water heaters to require four to five times the typical BTU input of a standard water heater. Consequently, the gas line to an existing tank water heater in a retrofit application may not have sufficient capacity to supply a new tankless water heater and a new supply line may be needed. All new gas lines must be pressure tested as prescribed by Code.

Electric Line

Gas fired Instantaneous tankless water heaters approved for residential installation will require a 120 volt electrical connection to operate the fan assisted system and ignite the burner. The outlet must be grounded and be within 6ft of the water heater. Installation of new electrical outlets must be in compliance with the requirements of the current California Electrical Code.

Combustion Air

All water heater installations must comply with current codes for combustion air. Air shall be provided per the manufacturer's installation instructions. Tankless water heaters located within habitable space will require submittal of manufacturer's specifications for combustion air supply and venting.

Venting

Tankless water heaters shall vent to exterior per manufacturer's printed instructions. Flue materials and location must also meet the requirements of the CMC/CPC. Type B flues used for standard water heaters typically cannot be used for tankless water heaters.

Clearances

Clearances for most water heaters are found on the appliance label. Note: front and top clearances are usually greater than side & rear.

- Access and working space must be provided.
- The opening must be at least 24" wide and large enough to remove the water heater.
- Tankless units installed in a garage must be elevated 18" above the floor unless it is listed as having a sealed combustion chamber (CPC507.13).
- Tankless water heaters located on roofs must have a permanent or foldaway inside stairway or ladder for access (CPC 508.3.1 & 508.3.2)

Permit Submittal Requirements

All new and retrofit tankless water heater permit applications for R-3 (residential) occupancies must contain the following information:

- A Completed Residential Permit Application
- Supply gas pipe sizing calculations & piping diagram
- The Manufacturer, Model number and BTUs required for the unit to be installed.
- The Manufacturer's specs for combustion air and venting (for units installed within structures)
- Exterior installations must be of a type approved for exterior use and may require approval of the Planning Department.

We will make every effort to issue your permit as quickly as possible, but review of your submittal may take 1-2 business days. The Permit, Job Card, Approved Fuel Calcs, and Manufacturer's Spec Sheets must be on site at the time of inspection.