

SUBJECT	EFFECTIVE DATE	CODE SECTION(S)
Permit Requirement for New Tankless Water Heaters	July 15, 2024	CBC 105.2 & CPC 1215.1

Purpose: The purpose of this policy is to clarify what is required for a tankless water heater permit submittal.
Plans are required for building permit issuance.

Background: On demand tankless water heaters require substantially more natural gas than standard storage tank water heaters. The existing gas line(s) may not be properly sized to provide the required volume of fuel and may require larger gas line(s) to handle the additional demand (See Figure 1).

On demand tankless water heaters require special venting to comply with specific manufacturer’s requirements. The entire existing water heater venting system may need to be replaced based on specific manufacturers’ requirements. For example, a plastic vent may be required, and the existing combination venting system may not be allowed (See Figure 1). Costs associated with the installation of a tankless water heater can be much more than those of a storage tank water heater. Installing new vents that comply with manufacturers’ specifications, and up sizing of existing gas supply line(s) are the main reasons for the increase in costs. Some costs may be reduced by prior planning of the proposed location of the replacement unit. Careful consideration may help decrease some of the costs associated with replacing a standard heater with an on demand tankless type.

Procedure: When replacing an existing storage tank water heater with an on demand tankless water heater, there are some important items to consider in the preliminary design phase:

- Sufficient gas supply
- Special venting requirements
- Location of proposed replacement (a tankless water heater located in an attic, floor-ceiling assembly or raised floor assembly requires a drainage pan and drain to an approved location (*CPC 507.5*)).

These items should be considered as part of the scope of work when applying for a building permit. The costs associated with performing any required building upgrades to install an on-demand water heater should be included in the contract price.

WHAT IS REQUIRED FOR A TANKLESS WATER HEATER PERMIT SUBMITTAL?

- A site plan or floor plan showing the proposed location of the tankless water heater. A floor plan must indicate the size and dimension of the room containing the water heater & the use of all rooms. The site plan must include property lines, a north arrow, existing structures, driveways and roadways, public-rights-of-way, and easements and a radial distance from the water heater to the nearest property line. A site plan or floor plan shall conform to the *minimum requirements for prepared plans handout*.
- A copy of the manufacturer’s installation instructions and an isometric drawing showing gas pipe sizes and load calculations from the meter to the most remote gas fueled appliance, in accordance with the current edition of the California Plumbing Code (See Figure 2).

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