

City of Moreno Valley CEDD - Building and Safety Division

TANKLESS WATER HEATERS

SUBMITTAL REQUIREMENTS

Applications are submitted online through SimpliCITY or at one of the kiosks available at City Hall.

REQUIRED PDF UPLOADS

All new and retrofit tank-less water heaters must contain the following information as <u>SUPPORTING</u> DOCUMENTS:

- 1. <u>Site / Floor Plan</u> showing the location of the gas meter, the location of the tank-less water heater, and the linear foot length from the gas meter to the tank-less water heater. Also, the gas line material type and pipe diameter. The tank-less water heater must be legible and clearly show the location and identify the room it's located in. Distance to openings if located outdoors.
- 2. Gas Supply: Supply gas pipe sizing calculations, BTUs, pipe diameter, and pipe length. Gas supply line must have a capacity of at least 200,000 Btu/hr. Do not assume that the fuel gas and venting system that already exists will be adequate for a tank-less water heater change out. It is common for a tank-less water heater to require four to five times the typical BTU input of a storage tank water heater. In the event the gas line does not have sufficient capacity to supply a tank-less water heater, a dedicated gas line may be required, or the gas line system will have to be retrofitted. (See the isometric diagram on page 2 for a sample).
- Specification sheets: Provide the manufacturer, model number and BTUs of the unit to be installed. Tank-less water heaters shall be installed according to the manufacturer's installation instructions. Manufacturer's installation instructions shall be on site and available for all inspections.
- 4. <u>An electrical source</u> must be provided, within 3 feet from the water heater and accessible to the water heater with no obstructions or as specified in the manufacturers installations instructions. Receptacles installed in a garage, unfinished location or outdoors must be GFCI protected.
- 5. **CF1R-ALT-05-E** Prescriptive Alterations-Simple Non-HERS must be filled out and submitted.

GENERAL REQUIREMENTS

- Water heaters located in garages must be protected from mechanical damage. This means placing them out of the path of vehicular traffic or providing a protective post or partition.
- Provide a temperature and pressure relief valve as required by the manufacturer. Must be hard
 pipe plumb to the outside and directed to the ground and terminate a minimum of 6" and a
 maximum of 24" above grade. When replacing an existing storage tank water heater, the
 temperature and pressure relief valve must be re-installed to drain to the outside. The relief valve
 may not discharge into a secondary drain pan.
- All lines shall be insulated if using a recirculation pump system.
- A water heater located above habitable space, where damage may occur if a leak developed, shall have a secondary pan with a ¾" minimum drain line to the outside.
- Generally, the replacement of a water heater does not affect the bonding of the pipes. However, if existing bonds are present, they need to be reinstalled per the National Electrical Code.



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PROHIBITED LOCATIONS

- Gas tank-less water heaters must not be installed in a room used or designed to be used for sleeping purposes. They shall not be installed in clothes closets or in a closet or other confined space opening into a bathroom or bedroom. The exception to these rules is a direct vent type tank-less water heater which is listed for installation in these types of spaces or an electric tankless water heater.
- Water heaters located in a bedroom or bathroom are required to:
 - Be installed in a dedicated closet with a listed, gasketed door assembly and a self-closing device.
 - All combustion air shall be obtained from the outside.

FUEL GAS

Gas supply line must have a capacity of at least 200,000 BTU/hr.

COMBUSTION AIR

- Tank-less water heaters shall be provided with combustion air and venting per the manufacturer's installation instructions.
- Tank-less water heaters located within habitable space will require submittal of the manufacturer's specifications for combustion air supply and venting.

CLEARANCES

- Clearances for most water heaters are found on the appliance label.
- Please note the front and top clearance is usually greater than the side and rear.
- Access and working space must be provided.
- The opening must be at least 24" wide and large enough to remove the tankless water heater.
- Tank-less water heaters installed in a garage must be elevated 18" above the floor unless it is
 listed as having a sealed combustion chamber. Note that electric water heaters with a switch
 and/or heating element located less than 18" above the base must also be elevated.

SAMPLE ISOMETRIC DIAGRAM

