## **PLUMBING SYSTEM**

WATER: DRAINS, FIRE-SPRINKLER, HEATER, METER, PUMPS, PURIFICATION, SOFTENER, SUPPLY, & WASTE SYSTEMS, IF PRESENT

This Section Includes - the domestic Water Heater. The Boiler or Furnace is described in the preceding section "Heating Systems."

## Water Heater, Potable

Inspected Features:

The following potable water heater, features and functions were carefully inspected:

- Electric line, for appropriate installation;
- Expansion tank (if any), for proper orientation;
- Flue pipe, for safe connections and draft;
- Operating controls, for ability to provide hot water when called for at a sink;
- Tank fill and drain valves, for appropriate installation;
- Temperature controls, for safe settings;
- TPRV (Temperature & Pressure Relief Valve), for type and installation:
- TPRV extension pipe (drain tube), for safe placement.

Definition:

Water Heater - supplies hot potable (drinkable) water for all domestic uses, such as bathing, cooking, cleaning, etc.

Location:

The water heater is installed adjacent to the heating system furnace or boiler.

Type:

This is a direct-fired (stand alone) water heater that heats potable (drinkable) water.

Fuel is burned in an open chamber, and hot combustion gas rises through a flue in the center of the tank. A portion of the heat exits through the flue (vent pipe), in this conventional water heater.

Fuel:

The energy source is natural gas.

Tank Size:

60 gallons.

Other Water-Heater Conditions: The water heater properly provided hot potable water, with the following exceptions:

TPRV Extension:

Repair - An extension pipe (drain line) needs to be added to the threaded TPR-Valve. The pipe's end should be plain, without threads. Capping the pipe end (screwing a cap on the threads) could lead to an explosion due to over-pressure in the hot water tank. A short pipe can spray hot water or steam that may scald a person standing near this boiler. These are important safety concerns that should be corrected promptly. I recommend that a qualified licensed plumber or HVAC contractor investigate further and install the needed extension pipe at the TPR-Valve.

## Note:

The temperature-pressure-relief valve (TPRV) is installed on the hot water tank to prevent an over-pressure condition, which could lead to a tank explosion. This valve and its extension pipe (drain line) is an important safety device.



