TECHNICAL BULLETIN
Water Heater Installation & Replacement

This Tech Bulletin describes the plumbing code for water heater replacements and new installations (see IRC and IPC for code language). The requirements are summarized as follows:

- Water heaters and storage tanks must be located and installed to provide access for maintenance and replacement. Fuel-fired water heaters cannot be installed in a room used as a storage or clothes closet.
- Temperature and Pressure (T&P) Relief Valve drain must run by gravity to the exterior of the structure.
- The T&P drain line must discharge full size to the exterior of the building.
- Overflow pans (metal for gas and/or plastic for electric) measuring 1 ½ inches deep with a 1 inch drain ran to the exterior are required on all water heaters installed in locations where leakage will cause damage.
- Combustion air is required for all gas water heaters.
- Flexible piping is allowed on T&P drain lines as long as not kinked or crimped.
- Any water heater located in a garage that has an ignition source must be elevated so the ignition source is at least 18 inches above the garage floor. This includes both electric and gas water heaters.
- A shut off valve is required on the cold water inlet side of the water heater.

Frequently Asked Questions:

Question: My existing water heater is in the center of the house, the existing T&P runs overhead to the outside. What are my options when I change my heater?
Answer: Because the T& P line and/or pan drain can not run by gravity to the outside. The T&P line can terminate in the pan. The incoming supply must have an automatic water shut off device (such as *Flood Stop*) with an alarm (such as *Water Alarm Leak Detector*) in the pan.

Question: My existing heater is in the center of the house and has a T&P drain line to the outside. A pan was added and I can't get the line to the outside. What do I do?
Answer: Cap pan and install an alarm (such as *Water Alarm Leak Detector*).

Question: Can the T& P drain and the overflow pan drain line connect to only one pipe?
Answer: No. These two drain lines must be provided with separate pipes and must terminate independently outside the building.

Question: I have an existing water heater that doesn't have an overflow pan. Do I have to bring it up to code?
Answer: Not until the water heater is replaced. When the water heater is replaced, the installation must satisfy current code requirements.

Question: I want to replace my existing storage water heater with a tankless water heater. How can this best be accomplished?
Answer: In practically every case, tankless or instantaneous water heaters require large amounts of energy in short bursts. Therefore, the gas piping or wire size must be upgraded to accommodate this extra capacity.