One Water Heater, Single Temperature with Vertical Storage Tank Forced Recirculation with Building Recirculation

Before installation of water piping review the following:

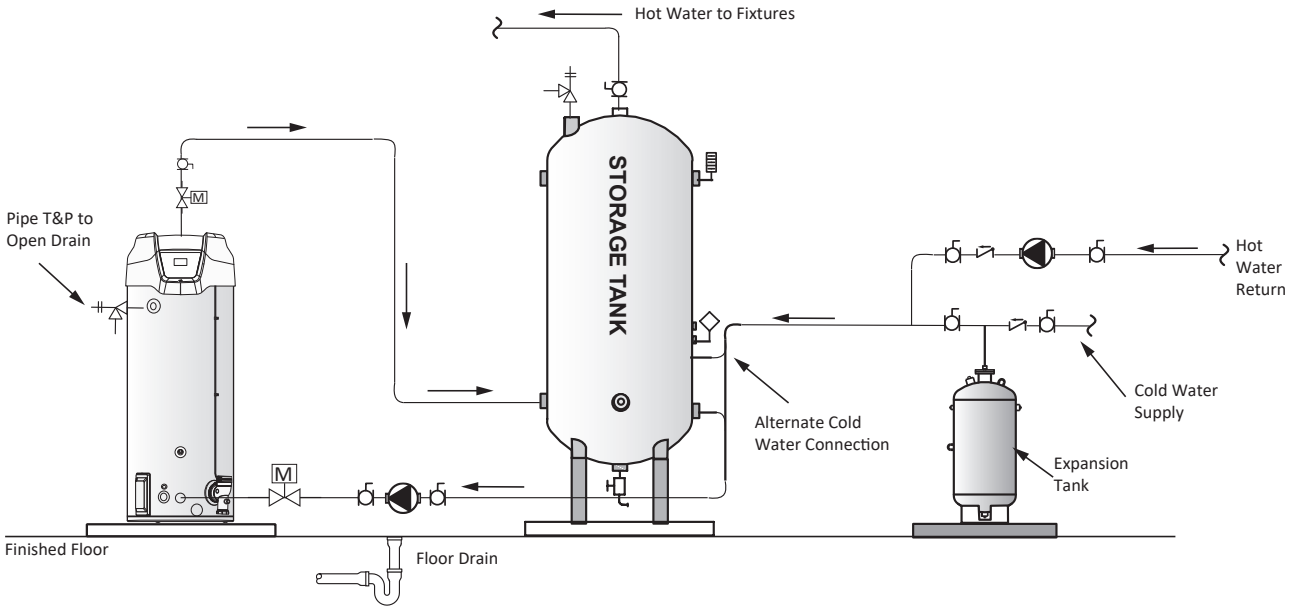
1. See ***Mixing Valves*** (page 22).
2. See ***Dish-washing Machines*** (page 22).
3. See ***Temperature-Pressure Relief Valve*** (page 23).
4. See ***Closed Water Systems*** (page 23) and ***Thermal Expansion*** (page 23).
5. See ***Water Line Connections*** (page 53).
6. If a pump is being installed between a water heater and storage tank or on a building recirculation loop wire according to ***Figure 83*** (page 99).
7. If a pump is being installed in a recirculation loop between the water heater and a commercial dishwasher wire according to ***Figure 84*** (page 99).

WARNING: THIS DRAWING SHOWS A SUGGESTED PIPING CONFIGURATION AND OTHER DEVICES. CHECK WITH LOCAL CODES AND ORDINANCES FOR ADDITIONAL REQUIREMENTS.

ANY MATERIAL, COMPONENT, OR VENDOR CHANGE MUST HAVE PRIOR APPROVAL BY THE APPLICABLE PRODUCT ENGINEERING DEPARTMENT.

LEGEND

- **Temperature & Pressure Relief Valve**
- **Pressure Relief Valve**
- **Circulating Pump**
- **Tank Temperature Control**
- **Drain Valve**
- **Shut-Off Valve**
- **Full-Port Ball Valve**
- **Check Valve**
- **Temperature Gage**
- **Water Flow Switch**
- **Mixing Valve**



NOTES:
1. Preferred piping diagram.
2. The temperature and pressure relief valve setting shall not exceed pressure rating of any component in the system.
3. Service valves are shown for servicing unit. However, local codes shall govern their usage.
4. The tank temperature control should be wired to and control the pump between the water heater(s) and the storage tank(s).
5. The water heater's operating thermostat should be set 5 degrees F higher than the tank temperature control.
6. Ensure that any installed recirculation system does not bypass or interfere in any way with shut-off valves.