

GENERAL:

1. The objective of this guideline is to provide minimum standards for design and installation plumbing systems. This section covers requirements for common work.

DESIGN GUIDELINES:

1. Section 22 0513 Common Motor Requirements.
 - 1.1. All motors shall meet minimum ASHRAE energy efficiency requirements.
2. Section 22 0516 Expansion Fittings, loops for plumbing piping
 - 2.1. System design shall provide adequate pipe offsets or loops and shall not use any manufactured expansion joint products.
 - 2.2. Provisions shall be made on vertical pipe risers to accommodate pipe growth when selecting pipe hangers and supports.
3. Section 22 0519 Meters and gauges for plumbing
 - 3.1. Water meters will be provided as specified in section 33 1233.
 - 3.2. Thermometers shall be provided on water heaters on both CW and HW piping.
 - 3.3. Pressure gauges shall be provided on the following pieces of equipment:
 - 3.3.1. After the building backflow preventer
 - 3.3.2. After the building water meter.
 - 3.3.3. After the water softeners
 - 3.3.4. After the water heater on HW piping. Where thermostatic mixing valves are installed, include thermometers on the hot & cold inlets and tempered outlet of the master mixing valves. (To aid in the initial setup of the valve as well as any future adjustments.)
 - 3.3.5. After the branch or isolation valve on each floor for both HW and CW piping.
4. Section 22 0548 Vibration, seismic Controls for Plumbing Piping and Equipment
 - 4.1. Follow requirements of IPC
5. Section 22 0553 Identification for Plumbing Piping and Equipment
 - 5.1. The following abbreviations SHALL BE used in design documents and as actual labels on piping in the finished building:
 - 5.1.1. CW Domestic Cold Water
 - 5.1.2. HW Domestic Hot Water
 - 5.1.3. HWR Domestic Hot Water Return
 - 5.1.4. NPCW Non-potable Cold Water
 - 5.1.5. NPCW Non-potable Hot Water
 - 5.1.6. NPHWR Non-potable Hot Water Return
 - 5.1.7. SW Sanitary Waste
 - 5.1.8. SV Sanitary Vent
 - 5.1.9. LW Laboratory Waste

- 5.1.10. LV Laboratory Vent
- 5.1.11. SPD Sump Pump Discharge
- 5.1.12. ST Storm Water