GENERAL PLUMBING PLAN & REVIEW REQUIREMENTS FOR COMMERCIAL BUILDINGS

Drain, Waste and Vents:
- Show a pipe material schedule listing the type of pipe being installed.
- Show a complete diagrammatic drawing on the building footprint and an isometric drawing.
- Show pipe-sizing calculations based on fixture unit values using the CPC Table 702.1.
- Show with annotation the size of each main, section and branch line of DWV piping.
- Show that the vents through the roof equal the aggregate cross-sectional area of which shall not be less than that of the largest required building sewer as determined by the CPC Table 703.2.
- If the restroom has more than a single water closet show a floor drain with a trap primer.
- If there is a clothes washer in a commercial building show a floor drain with a trap primer.

Water:
- Show a pipe material schedule listing the type of pipe being installed.
- Show a complete diagrammatic drawing on the building footprint and an isometric drawing.
- Show pipe-sizing calculations based on the California Plumbing Code Chapter 6, Tables 610.3 & 610.4, or not both Appendix “A”. If sizing flushometer type valves in Chapter 6 incorporate Table 610.10 in the calculations. Total Developed Length (TDL) is the distance from the meter at the street to the most remote outlet in the system. Use a low available guaranteed pressure of 40 psi per the Public Utilities Commission’s General Order #103.
- Use a required minimum pressure of 8 psi for tank type fixtures and 20 psi for flush valve type fixtures.
- Show with annotation the size of each main, section and branch of water piping.
- Show a “Pipe Sizing Chart” on the plan, i.e. ½” = 2 Fixture Units, ¾” = 5 Fixture Units, etc.

Gas:
- Show a pipe material schedule listing the type of pipe being installed.
- Show a complete diagrammatic drawing on the building footprint and an isometric drawing.
- Show pipe-sizing calculations based on the California Plumbing Code Chapter 12, Table 1216.2(1) for low pressure, 1216.2(4) for 2psi, 1216.2(5) for 3 psi, 1216.2(6) for 5 psi, all for schedule 40 steel piping. Use specified charts for other material types i.e. CSST.
- Piping on the outside of a structure needs to be painted for black steel or use galvanized pipe.
- Show with annotation the size of each main, section and branch of piping.
- Show the BTU rating for each appliance.
- Use 1000 as a divisor to convert BTU’s into Cubic Feet per Hour (CFH).
- Show the Total Developed Length (TDL), it is the piping distance from the meter to the most remote appliance in the system.
- If the piping run on the roof is more than 100’ of straight run an expansion loop is required per County of Sacramento policy.

Roof Drains and Overflows:
- If the project is a new building or is an addition to an existing Building, show all roof drains and overflows on the plans.
- Show calculations for the roof drains and overflows per the CPC Chapter 11 using an average rainfall of 3” per hour.
- Size horizontal rainwater piping per CPC Table 1101.7 and roof drains and vertical piping per CPC Table 1101.11.
- Roof drains must not drain over a public walkway.
- Roof overflows need to daylight to an observable location as high as possible.
Condensate:
- Show a complete diagrammatic drawing of primary and secondary condensates on the building footprint.
- Show all cleanouts as required.
- Show where the condensate lines will terminate.
- Condensates may not drain onto a paved area.

Finish:
- Show a plumbing fixture schedule including the manufacturer, model number and a description of the fixture. Include all fixtures including floor sinks, floor drains, specialty fixtures, etc.
- Show that the minimum numbers of fixtures are being installed per the CPC Table 422.1 and Table “A”.

General Information:
- Show a ¼” scale drawing for the accessible restrooms.
- Show mandatory Title-24 plumbing requirements on the plans.
- Show a designers stamp and wet signature. Unlicensed individuals may not design or sign plumbing systems. Plumbing systems must be designed and signed by appropriately licensed or registered professionals, or appropriately licensed contractors as allowed by the Professional Engineers Act. (Ref.: Business and Professions Code Sections 5537.2, 5537.4 and 6737.4.)

The above list contains general requirements for plumbing systems. Any specific plan review may require more information on your plans. Not all of the above listed requirements may pertain to your project.