The following items must be provided in order to properly apply for a Commercial or Multi-family plumbing permit. Plans and application cannot be accepted if the requested information is incomplete. Include this checklist with your application.

**PLAN REQUIREMENTS**

- Pipe size and fixture units for sanitary and potable water systems.
- Calculations for water meter sizing and DWV fixture units for building drain and roof drains.
- Location and type of proposed fixtures.
- Riser diagram with waste, vent and potable water piping locations and sizes.
- Isometric drawings are required for buildings over 3 stories, commercial kitchens and grocery stores.
- Medical gas piping: plot plan of the site indicating the location of existing or new cylinder storage areas, property lines, driveways, and existing or proposed new buildings. Show piping layout of the proposed piping system or alteration, including alarms, valves, origin of gases, and user outlets/inlets. The demand and loading of any piping, existing or future, shall also be indicated. Indicate all alarms and backup power supply for the alarms. Include complete specifications of materials.
- Sumps: Show elevations of finish floor and of sanitary sewer.
- Underslab footing drains: Detail of drains/cleanouts and design in accordance with the geotechnical engineer.
- Pipe size and square footage of roof area for roof drains/overflows. Include details and calculations.
- Misc details showing construction of interceptors, piping support, firestop penetration systems, etc.

**STRUCTURAL REQUIREMENTS**

- Provide framing plans and calculations, for vertical and lateral loads, stamped by a Washington State registered professional engineer for units weighing more than 400 pounds.
- All floor supported plumbing fixtures must be anchored to the structure to resist displacement vertically and on both horizontal axis due to seismic motion. Specify anchorage for floor supported equipment on plans.
- Suspended plumbing equipment shall have rigid vertical hangers and be braced in both horizontal directions. Connections by pipes or ducts that are, or contain non-rigid elements are not of inherent sufficient strength, or which are not adequately anchored will not be acceptable as equipment or appliance anchors. Detail anchorage for suspended equipment on drawings.
- Where the Risk Category of a Building is classified as a Category III or IV occupancy per IBC Table 1604.5, provide seismic design for anchorage as specified in the IBC and ASCE 7 as required.