

Below is a list of requirements necessary to complete a review of plumbing systems in commercial buildings. Please read the following carefully to ensure you provide all required information to **minimize delays** in the plan review process.

1. **Utility Site Plan (if new services are to be installed):** The utility plan must show the locations, sizes and slopes of all sanitary sewer, all storm sewer, and water service piping within the property lines. If wells or sewage treatment systems will be located on the property, they must be shown on the plan so that proper isolation distances can be verified. The utility plan must indicate the pipe materials to be used for each service unless otherwise listed in the specifications. The plan must include a directional reference.
2. **Floor plan:** The floor plan must show the locations of all plumbing fixtures. The sizes and locations of all horizontal sanitary and storm piping must be shown on the plan.
3. **Water Riser Diagram:** The drawing must show an isometric view of the water distribution piping from the water service entrance to the connection to all plumbing fixtures and equipment. The plumbing fixtures, equipment connected to the water distribution system, and all pipe sizes must be clearly labeled on the drawing.
4. **Soil, Waste and Vent Riser Diagram:** The drawing must show an isometric view of the waste and vent piping within the building. All pipe sizes and fixtures must be clearly labeled on the drawing.
5. **Material Specifications:** A list of fixtures, materials, and procedures must be provided which includes the following:
 - a. A list of the fixtures and appurtenances that are connected to the potable water distribution system or that discharge to the sanitary waste system. The list must include manufacturer and model number of each plumbing fixture or appurtenance.
 - b. The type and quality standard (e.g. ASTM, ANSI, etc.) of the pipe materials to be used in the plumbing system, including the type of joints.
 - c. The pressure testing and disinfection procedures.
6. **Roof plan:** A roof plan must be provided *if roof drains will be installed that are piped inside the building*. If no internally piped roof drains will be installed, a roof plan is not necessary for plan review. A statement should be included that the roof is pitched and the building is served by scuppers.
7. **Signature:** All plumbing plans that are submitted to MNSPECT must be signed by a master plumber or a professional engineer who is registered in the State of Minnesota. **Signature and license number must be on each plan sheet.**

SAMPLE DIAGRAMS

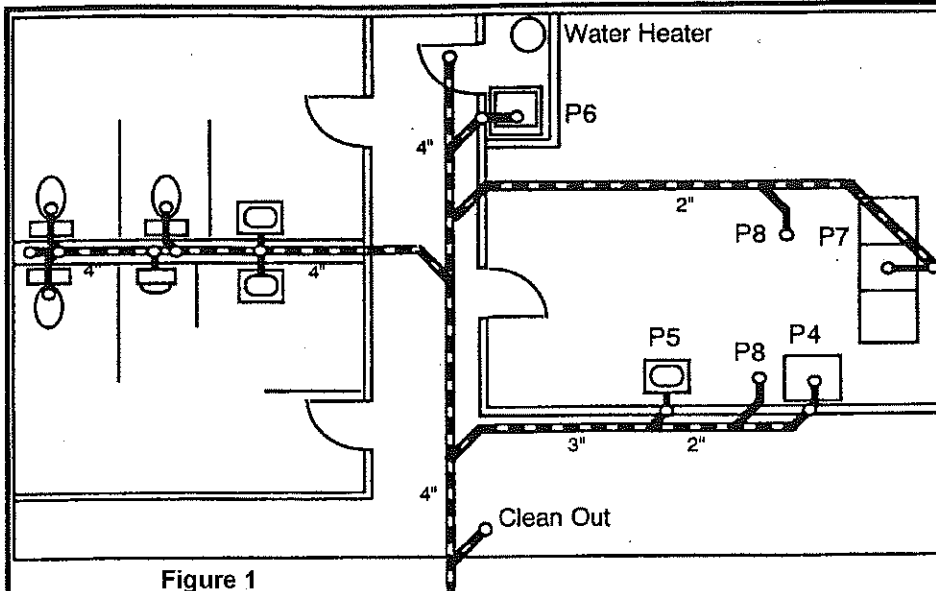


Figure 1
Floor Plan

- P1 Tank Water Closet
- P2 Lavatory
- P3 Urinal
- P4 Dishwasher
- P5 Hand Sink
- P6 Mop Sink
- P7 3-Compartment Sink
- P8 Floor Drain (without backwater valve)

Maximum Developed Length: 40 Feet
Pressure Range: 46 - 60 psi

Individual Branches 1/2" Unless
Otherwise Noted

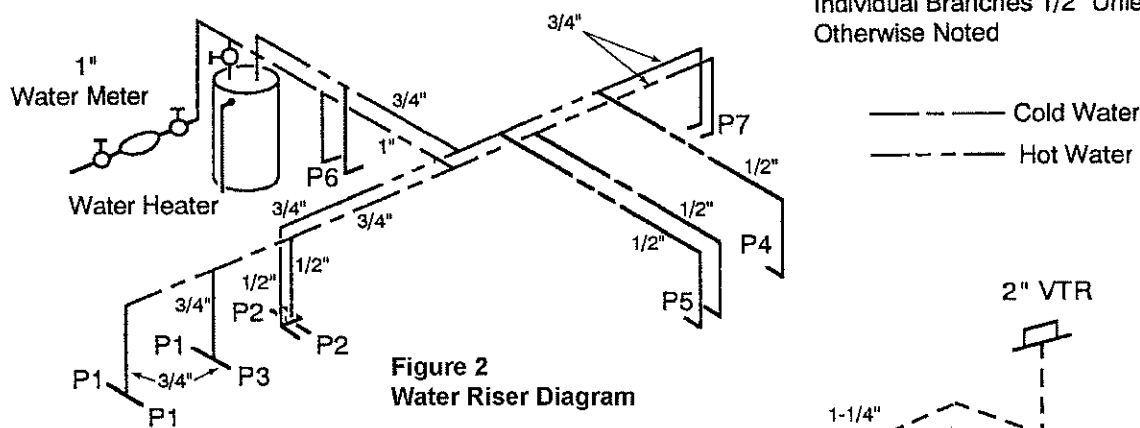


Figure 2
Water Riser Diagram

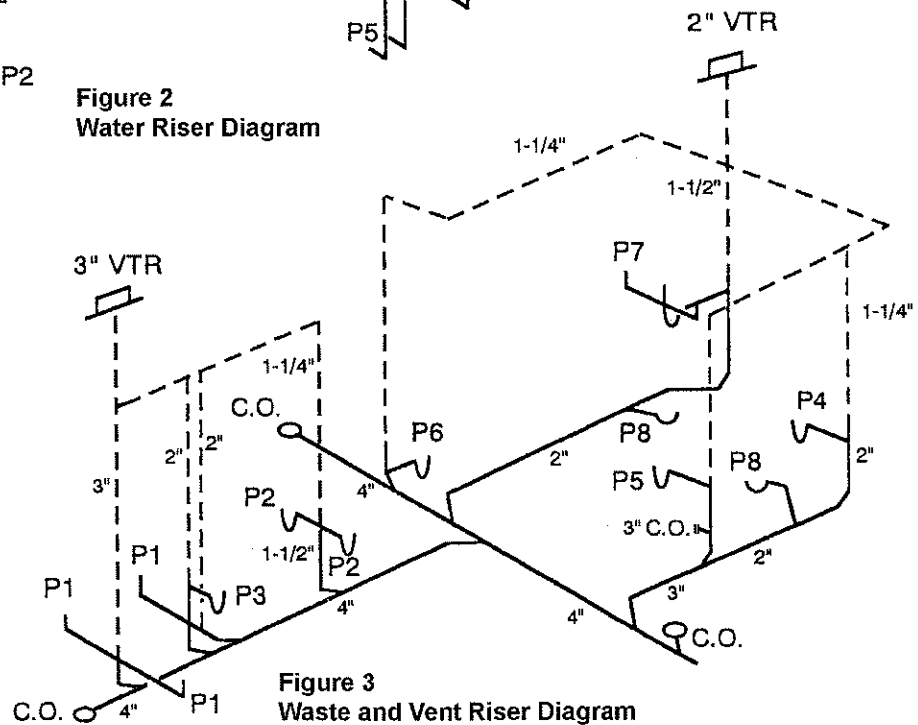


Figure 3
Waste and Vent Riser Diagram

SAMPLE DIAGRAMS