



DESIGN REQUIREMENTS

GENERAL PLUMBING REQUIREMENTS

GENERAL INFORMATION

- 1.1 Refer to Section 230000 for General Mechanical Requirements.
- 1.2 Refer to Section 230529 for Hangers and Supports.
- 1.3 Refer to Section 230553 for Pipe and Equipment Identification Requirements.
- 1.4 Refer to Section 230800 for Commissioning Requirements.
- 1.5 Refer to list of Preferred Manufacturers.
- 1.6 All public restrooms shall be provided with a floor drain.
- 1.7 All mechanical rooms shall be provided with a minimum of one (1) hose bib. The location is to be coordinated with Columbia University Facilities.
- 1.8 All valves and cleanouts are to be accessible for operation and maintenance either through coordination with other service or via access panels.
 - a. Access panels shall be sized to allow for maintenance.
- 1.9 All fixtures, fittings and equipment must be reviewed by Columbia University Facilities prior to be issued for bid.
- 1.10 Domestic Water:
 - a. Criteria:
 - 1. Provide and verify a minimum of 35 psi to the most hydraulically remote fixture during minimum pressure and maximum flow conditions. Testing shall occur prior to turnover.
 - 2. Limit water velocity to 8 fps on main distribution branches, 4 fps on smaller branch legs.
 - 3. For minimum domestic hot water supply temperatures, use minimum CDC Guidelines.
 - 4. Design shall exclude dead legs.
 - 5. Where mixing valves are used, anti-scaled devices shall be employed.



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b. Water Supply:

1. All water services are to be provided with NYCDEP approved water meters and backflow prevention devices. Remote reader locations are to be coordinated with the Columbia University Facilities.

1.11 Design Documentation for Plumbing Work

- a. The design documents shall include riser diagrams for each system indicating all major components of the system, isolation and control valves, fixtures, drains, vents, pipe sizes, pressure and/or temperature relief devices, direction of flow, etc.
- b. The design documents shall include fixture schedules indicating individual fixture types, capacities, sizes and designations.
- c. The specifications shall require the contractor to cover, cap or otherwise protect open ends of all piping during construction to prevent damage to threads or flanges and prevent entry of foreign matter. Water supply piping shall be disinfected.
- d. Provide scaled vertical section at major horizontal distribution pathways (such as horizontal pipe chases and above congested hallway ceilings), showing a coordinated depiction of all MEP systems at multiple locations.

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NOT APPLICABLE.

CONSTRUCTION REQUIREMENTS –

NOT APPLICABLE.

REFERENCE

- 4.1 The applicable CSI Specification Section is 22 00 00.