PLUMBING FIXTURES

DESIGN GUIDELINES

1. General
   a. Water closets
      • Floor mount tank type water closets are acceptable in some office building locations.
      • Wall hung manual flush valve water closets are preferred.
      • Where floor drain requires a trap primer, provide Sloan flush valve with optional Sloan vacuum breaker one-piece chrome-plated trap primer takeoff routed to nearest floor drain.
      • Auto flush valves are not preferred. Autoflush have been problematic with flushing consistency. This occurs where seat covers are specified as well.
   b. Lab sinks
      • Include overflows on all Lab sinks.
   c. Lab faucets
      • Include built in vacuum breakers for all lab faucets with wrist-blade handles and serrated nozzle.
      • DI faucets shall not be plastic. Quarter turn, wrist blade handles are preferred.
   d. Healthcare faucets
      • All healthcare faucets to be gooseneck style with laminar flow.
   e. Emergency Fixtures
      • Shall meet the ANSI Z358.1-2014 standard that establishes a universal minimum performance and use requirements for all Eyewash and Drench Shower equipment used for the treatment of the eyes, face, and body of a person who has been exposed to hazardous materials and chemicals. Eyewash drench hose type units similar to Guardian G5022 are allowable with locking clip to engage when handle is depressed, providing “hands free” operation. Flexible hose shall be braided stainless steel.
      • Showers
         1. Floor drains are typically not installed for Emergency showers.
         2. Verify all existing Emergency showers within the project scope have tempered water. Coordinate with WUSM project manager if any are found to have cold water only.
      • Eyewashes
         1. Mixing valves are typically located below the sink where the eyewash is located.
2. Verify all existing eyewashes within the project scope have tempered water. Coordinate with WUSM project manager if any are found to have cold water only.

f. Coffee makers and ice makers.
   • Provide wall boxes for water connections.
   • Provide water filters at ice maker wall boxes and maintain minimum 24” clear from ice maker heat rejection.

g. Garbage disposals are prohibited.

h. Insta-Hot hot water dispensers are prohibited. Hot water is typically provided at coffee makers.

i. Trap primer
   • Installed location shall be accessible.
   • Shall not be installed in a wall.
   • Provide trap primer integral with water closet vacuum breaker where possible.

j. Wall box
   • Coordinate box installed location and if it is to be above counter for ice makers and coffee makers.
   • Provide Watts check valve backflow device at ice maker connection.
   • Provide water hammer arrestors on locations with quick closing valves.

b. Water Hammer Arrestors
   • Souix Chief Hydra-Rester.

2. Redundancy

c. Shutoff valves shall be provided for each fixture.

3. Clearances
   a. Drawings shall indicate the maintenance clearances required.

4. Capacity
   a. Provide the proper amount to meet code.

5. Related Sections
   a. Plumbing Sanitary and Vent piping.
   b. Plumbing Water piping.
   c. Environmental Health & Safety (EH&S)

6. Demolition
   a. Pipe removed or demolished shall be back to nearest active main and capped.
b. Piping shall not be abandoned.

EQUIPMENT AND PRODUCT REQUIREMENTS

1. Vitreous China Fixtures:
   a. Approved Manufacturers: (in order of preference)
      • American Standard
      • Toto (For use when floor mount flush tank fixtures are allowable.)
   b. Construction to comply with ASME A112.19 Standards.

2. Flush Valves
   a. Sloan
   b. If autoflush valves are requested on a project, provide Sloan type.

3. Stainless Steel Fixtures:
   a. Approved Manufacturers: (in order of preference)
      • Elkay
      • Just
   b. Construction to comply with ASME A112.19.

4. Faucets
   a. Approved manufacturers (in order of preference):
      • Chicago
      • Water Saver

5. Lab Turrets
   a. Approved manufactures (in order to preference):
      • Chicago
      • Water Saver

6. Lab eyewash and shower stations
   a. Approved manufactures (in order to preference):
      • Guardian
      • Speakman
      • Bradley

7. Floor drain and floor sinks
a. Approved manufactures (in order to preference):
   
   • JR Smith

END OF SECTION