15400D - PLUMBING SYSTEMS

A. SECTION INCLUDES

1. Piping (Potable Water, Drainage and Vent)
3. Specialties
4. Fixtures
5. Pumps
6. Equipment
7. Compressed Air
8. Pure Water

B. DESIGN CRITERIA

1. Domestic water lines shall be tied to the University’s campus distribution system if possible.
2. Domestic water shall be monitored by the Landis and Gyr, campus wide building control system.
3. Specify “Full Flow-Final Flush and Strainer Cleaning or Replacement” on all new domestic water supply systems.
4. Specify dual, domestic water service backflow preventers in all new construction.
   a. As a minimum, require one full line size unit and a parallel unit at one line size, or greater. Bypass piping around backflow preventers is not allowed.
   b. Specify installation be in accordance with authorities having jurisdiction, current plumbing code and Cincinnati Water Works requirements.
5. Domestic hot water can be produced using either central plant steam or electric heating equipment. Perform an economic study to determine which system is the most effective.
6. Remote domestic hot water fixtures shall be served by a recirculating distribution system. Electric tracing tape is not permitted.
7. Manufacturer, basis of design:
   b. Flush-valves: R & G Sloan Co.
   c. Laboratory Faucets: T & S Brass and Bronze Works, Inc. or Chicago Faucet.
8. Specify sensor operated (hands free) electronic hand washing faucet.
   a. ADA compliant.
   b. Infrared sensor
   c. Solenoid valve flow controls
   d. Mixing valve for temperature control
   e. Transformer for 24 VAC operation.
9. If a booster pump is required, it shall be a duplex system.
10. Storm detention will be required for all buildings, by the Metropolitan Sewer District (MSD).
11. Pure water shall be ASTM Electronics Grade E-1, unless specifically requested otherwise by the University.
12. Central vacuum systems shall have a blank-off pressure capability of 19 inches of mercury. The dynamic conditions of flow and negative pressure will dictate line and fitting size, and shall be determined for the specific application.

13. Water in garages shall be available at hose bibbs at a minimum of two locations at opposite corners of garages.

14. Plumbing risers in garages shall be provided with drain down provisions.

15. Crosses shall not be permitted for use in sanitary waste lines. Use sanitary tees instead.

END