

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following plumbing specialties:
1. Backflow preventers.
 2. Water regulators.
 3. Balancing valves.
 4. Water filters.
 5. Thermostatic water mixing valves.
 6. Strainers.
 7. Key-operation hydrants.
 8. Trap seal primer valves.
 9. Miscellaneous piping specialties.
 10. Cleanouts.
 11. Floor drains.
 12. Roof drains.
 13. Overflow roof drains.
 14. Floor sinks.
 15. Deck drains.
 16. Drain receptors.
 17. Grease interceptors

1.2 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Water Filter Cartridges: Equal to 200 percent of amount installed for each type and size indicated.
 2. Operating Key Handles: Equal to 100 percent of amount installed for each key-operated hose bibb and hydrant installed.

PART 2 - PRODUCTS

2.1 BACKFLOW PREVENTERS

- A. Manufacturers:
1. Wilkins
 2. Cla-Val Co.
 3. Watts Industries, Inc.; Water Products Div.
 4. Zurn Industries, Inc.;
 5. Or approved equal.

2.2 BALANCING VALVES

- A. Calibrated Balancing Valves: Adjustable, with two readout ports and memory setting indicator. Include manufacturer's standard hoses, fittings, valves, differential pressure meter, and carrying case.
1. Manufacturers:
 - a. Flow Design, Inc.

- b. Taco, Inc.
- c. Watts Industries, Inc.; Water Products Div.
- d. Or approved equal.

2.3 WATER FILTERS

- A. Manufacturers:
 - 1. Filtrine Manufacturing Company; Drinking Water Division.
 - 2. PURA, Inc.
 - 3. U.S. Filter; Filterite Div.
 - 4. Or approved equal.

2.4 THERMOSTATIC WATER MIXING VALVES

- A. Manufacturers:
 - 1. Mark Controls Corp.; Hydroguard series 430.
 - 2. Symmons Model No. 5-130.
 - 3. Or approved equal.

2.5 KEY-OPERATION HYDRANTS

- A. Manufacturers:
 - 1. Smith, Jay R. Mfg. Co.
 - 2. Watts Industries, Inc.; Drainage Products Div.
 - 3. Woodford Manufacturing Co.
 - 4. Or approved equal.

2.6 TRAP SEAL PRIMER VALVES

- A. Adjustable Supply-Type Trap Seal Primer Valves: ASSE 1018, water-supply-fed type, with the following characteristics:
 - 1. Manufacturers:
 - a. E & S Valves.
 - b. Precision Plumbing Products, Inc.
 - c. Smith, Jay R. Mfg. Co.
 - d. Or approved equal.
 - 2. 125-psig minimum working pressure.

2.7 MISCELLANEOUS PIPING SPECIALTIES

- A. Water Hammer Arresters: ASSE 1010 or PDI-WH 201, metal-bellows type with pressurized metal cushioning chamber. Sizes indicated are based on ASSE 1010 or PDI-WH 201, Sizes A through F.
 - 1. Manufacturers:
 - a. Zurn Industries, Inc.; Specification Drainage Operation
 - b. Smith, Jay R. Mfg. Co.
 - c. Tyler Pipe; Wade Div.
 - d. Or approved equal.

2.8 CLEANOUTS

- A. Cleanouts: Comply with ASME A112.36.2M.
 - 1. Application: Wall cleanout.

2. Products:
 - a. Smith, Jay R. Mfg. Co.; Fig. 4422.
 - b. Watts Industries, Inc., Drainage Products Div.; W-8450-R.
 - c. Zurn Industries, Inc., Specification Drainage Operation; Z-1441.
 - d. Or approved equal.

2.9 FLOOR DRAINS

- A. Floor Drains: Comply with ASME A112.21.1M.
 1. Application: Floor drain.
 2. Products:
 - a. Smith, Jay R. Mfg. Co.; Fig. 2005-A.
 - b. Watts Industries, Inc., Drainage Products Div.; WADE W-1200.
 - c. Zurn Industries, Inc., Specification Drainage Operation; Z-415.
 - d. Or approved equal.

2.10 ROOF DRAINS

- A. Roof Drains: Comply with ASME A112.21.2M.
 1. Application: Roof drain.
 2. Products:
 - a. Smith, Jay R. Mfg. Co.; Fig. 1010.
 - b. Josam; Model 21500.
 - c. Zurn Industries, Inc., Specification Drainage Operation; Z-100.
- B. Roof Drains: Comply with ASME A112.21.2M.
 1. Application: Gutter drain.
 2. Products:
 - a. Smith, Jay R. Mfg. Co.; Fig. 1630T.
 - b. Josam; Model 24500-27.
 - c. Zurn Industries, Inc., Specification Drainage Operation; Z-180-HD.
- C. Roof Drains: Comply with ASME A112.21.2M.
 1. Application: Overflow drain.
 2. Products:
 - a. Smith, Jay R. Mfg. Co.; Fig. 1080.
 - b. Watts Industries, Inc., Drainage Products Div.; WADE 3000-D.
 - c. Zurn Industries, Inc., Specification Drainage Operation.
 - d. Or approved equal.

2.11 FLOOR SINKS

- A. Floor Sinks: Comply with ASME A12.21.1M.
 1. Application: Floor Sink.
 2. Products:
 - a. Smith, Jay R. Mfg. Co.; Fig 3100.
 - b. Zurn Industries, Inc., Specification Drainage Operation; Model No. Z-1910.
 - c. Josam Co.; 49000.
 - d. Or approved equal.

2.12 DECK DRAINS

- A. Deck Drains: Comply with ASME A112.21.1M.

1. Applications: Deck drain.
2. Products:
 - a. Smith, Jay R. Mfg. Co.; Fig. DX2312B.
 - b. Zurn Model No. Z-530.
 - c. Or approved equal.

PART 3 - EXECUTION

3.1 GENERAL

- A. Install per Design/Builder's and manufacturer's requirements to maintain warranty.

3.2 DEMONSTRATION

- A. Engage a factory-authorized service representative to train the University's maintenance personnel to adjust, operate, and maintain trap seal primer systems. Refer to Division 1 Section "Closeout Procedures."

END OF SECTION