

SECTION 221319- PLUMBING SPECIALTIES

PART 1-GENERAL

1.1 WORK INCLUDED

- A. Roof drains
- B. Floor drains
- C. Floor Sinks
- D. Cleanouts.
- E. Water hammer arrestors.
- F. Wall Hydrants
- G. Hose Bibb
- H. Water/Gas Energy Monitor Meters

1.2 REFERENCES

- A. ANSI/ASSE 1011 - Hose Connection Vacuum Breakers.
- B. ANSI A112.21.1 - Floor Drains.
- C. ANSI A112.26.1 - Water Hammer Arresters.
- D. ASME A112.36.2 - Cleanouts.
- E. ASSE 1019 – Wall Hydrants

1.3 QUALITY ASSURANCE

- A. Manufacturer: For each product specified, provide components by same manufacturer throughout.

1.4 SUBMITTALS

- A. Submit shop drawings and product data per Applicable Division I Specifications.
- B. Include component sizes, rough-in requirements, service sizes, and finishes.

1.5 WARRANTY

- A. Contractor shall warranty entire systems and equipment for a period of one (1) year.

PART 2-PRODUCTS

2.1 ROOF DRAIN (RD)

- A. Acceptable Manufacturers
1. J.R. Smith
 2. Watts
 3. Zurn
- B. Duco cast iron body with adjustable extension sleeve, flashing clamp, gravel stop, dome, and sump receiver; J.R. Smith 1015-Y-C-R (size per plans).

2.2 EMERGENCY ROOF DRAIN (ERD)

- A. Acceptable Manufacturers
1. J.R. Smith
 2. Watts
 3. Zurn
- B. Duco cast iron body with adjustable extension sleeve, flashing clamp, gravel stop, dome water dam, and sump receiver: J.R. Smith No. 1080-Y-C-R (size per plans).

2.3 FLOOR DRAIN-1 (3" FD-1)

- A. Acceptable Manufacturers
1. J.R. Smith
 2. Watts
 3. Zurn
- B. Duco cast iron body and flashing collar with nickel bronze adjustable strainer head; J.R. Smith No. 2005 (size per plans) Provide and install ASSE 1072 trap seal for each floor drain in lieu of trap primers.

2.5 FLOOR SINK (4" FS)

- A. Acceptable Manufacturers
1. J.R. Smith
 2. Watts
 3. Zurn
- B. Duco cast iron body and flashing collar with nickel bronze ½ grate, square top, J.R. Smith No. 3100Y-12 (size per plans).

2.6 CLEANOUTS (CO)

- A. Acceptable Manufacturers
 - 1. J.R. Smith
 - 2. Watts
 - 3. Zurn
- B. Floor Cleanout: Duco cast iron with round adjustable scoriated secured nickel-bronze top; J.R. Smith No. 4020.
- C. Wall Cleanout: Duco cast iron spigot ferrule with cast bronze taper threaded plug with stainless steel round cover; J.R. Smith No. 4402.

2.7 WATER HAMMER ARRESTORS

- A. Acceptable Manufacturers
 - 1. J. R. Smith
 - 2. Watts
 - 3. Zurn
- B. ANSI A112.26.1; sized in accordance with PDI WH-201, precharged suitable for operation in temperature range, 100 to 300 degrees F and maximum 250 psig working pressure; Model #5000 series manufactured by J.R. Smith.

2.8 WALL HYDRANT (WH-A)

- A. Acceptable Manufacturers
 - 1. Zurn
 - 2. J.R. Smith
 - 3. Watts
- B. Bronze body, stainless steel box, bronze parts, hose connection, integral vacuum breaker and operating keylock: Zurn No. Z-1350.

2.9 WALL HYDRANT (WH-B)

- A. Acceptable Manufacturers
 - 1. J.R. Smith
 - 2. Zurn
 - 3. Watts
- B. Bronze hydrant with hose connection, integral vacuum breaker and "T" handle key, non-freeze; J.R. Smith No. 5509QT.

2.10 HOSE BIBB (HB)

- A. Acceptable Manufacturers
 - 1. Chicago Faucet
 - 2. Woodford

3. Acorn

- B. Single water fitting with vacuum breaker, spout, ¾" integrated hose threaded outlet, loose key cap with 293-6 removable tee handle, chrome plated finish; Chicago Faucet No. 952.

2.11 ENERGY MONITORING METERS

A. Water Monitoring Meter

Provide water flowmeter in location shown on drawings. Meters shall be line sized of the compound or magnetic type. Readout shall be in gallons. Provide 4-20MA or 0-10 VDC output to Building Automation System, coordinate with controls contractor. Water meter flow range ½-100 GPM, pressure rating of 30-150 psi, accuracy of 1.5 percent between minimum and maximum flow range. Install usage meters and by-pass with three isolation valves around meters as required. Bypass line and isolation valves to be line size. Wiring by controls contractor.

B. Gas Monitoring Meter

Provide natural gas meter with pulser type index to monitor total building usage. The meter shall be installed downstream of the utility company service meter as shown on drawings. BAS / Direct Digital Control system shall interface with gas meter to monitor gas usage and provide reports. Meter shall be American Metering Company, or equal by Sensus Metering Systems or Schlumberger RMS. Install usage meters and by-pass with three isolation valves around meters as required. Bypass line and isolation valves to be line size. Wiring by controls contractor.

END OF SECTION 221319