

213000 Fire Pumps

Sections Included In This Standard:

- 1.1 Flow Tests
- 1.2 Power Source
- 1.3 Pump Room
- 1.4 Configuration
- 1.5 Gauges
- 1.6 Suction Piping
- 1.7 Valves
- 1.8 Variable Speed Drive
- 1.9 Test Hydrants and Headers
- 1.10 Sensing Lines
- 1.11 Local Alarm Bell
- 1.12 Backflow Prevention

1.1 FLOW TESTS

Have a flow test performed prior to the start of any design work. The test shall be performed by a licensed contractor for this type of work. Facilities Services Fire Safety Shop shall be notified of the test at least 1 day prior to test. ~~The test is conducted free of charge by PPD.~~ The project Architect/Engineer shall coordinate this test and the responsible design engineer shall be present for the fire flow test.

1.2 POWER SOURCE

- A. General: Power shall be electricity from a reliable, protected source.
- B. Emergency Generators: An emergency generator is not required.

1.3 PUMP ROOM

- A. Working Space: Provide adequate space for complete servicing around and above fire pumps.
- B. Emergency Lighting: Provide emergency lighting in the pump room.
- C. HVAC: Provide adequate ventilation in the pump room and maintain a minimum air temperature of 40°F.
- D. Provide a floor drain.

1.4 CONFIGURATION

- A. The preferred fire pump is the horizontal split case type with electric drives.
- B. Vertical split case and vertical turbine fire pumps are also acceptable if indicated by project conditions. Justification for use shall be provided to Facilities Services in writing.
- C. In-line and end-suction fire pumps are not permitted.

1.5 GAUGES

- A. Provide a pressure gauge on discharge side of pump.
- B. Provide a compound pressure and vacuum gauge on the suction side of the pump.
- C. Provide a pressure gauge & compound pressure/vacuum gauge on the jockey pump.
- D. Gauges shall be stamped by the manufacturer to indicate the year installed.

1.6 SUCTION PIPING

Shall be Schedule 40, galvanized, type with threaded, flanged, or grooved connections.

1.7 VALVES

Circulation Relief Valve; discharge to drain.

1.8 VARIABLE SPEED DRIVE

Not required or desired.

1.9 TEST HYDRANTS AND HEADERS

- A. Locate test header so as to be capable of discharging to a safe location.
- B. Locate test hydrants so as to not wash out landscaping or undermine footings, and require the installing contractor to furnish a fire hose of appropriate length to direct water away from the building.

1.10 SENSING LINES

- A. Separate sensing lines are required for the Jockey Pump and Main Pump Controllers.
- B. Sensing lines shall be of brass, copper, or #300 stainless steel.

1.11 LOCAL ALARM BELL

- A. Provide a restricted access disconnect for the local alarm bell.

1.12 BACKFLOW PREVENTION

Backflow preventers are required. Refer to Section 331000.

END OF SECTION