



17.12. 1050

STANDARD FOR INSTALLATION OF CENTRIFUGAL FIRE PUMPS

(NFPA 20-2003)

EFFECTIVE DATE: MARCH 31, 2008

NFPA 20-2003 edition, including appendices is hereby added to the list of recognized standards, as contained in Chapter 45 of the California Fire Code, with the following amendments:

Section 5.12.1 Amend to add the following:

All exterior fire pumps shall be installed in a dedicated building (pump house).

Section 5.14.4 Amend to read as follows:

All fire pumps shall be installed with a bypass. The size of the bypass shall be at least as large as the pipe size required for discharge pipe as specified in Table 5.25 (b).

Section 5.14.9 Amend to add the following:

(6) Positive supply pressure shall be maintained through alarms that shall be arranged for audio and visual annunciation at the FACP and in the fire pump room if the water supply drops below 5 psi.

(2) A low-suction throttling valve shall be installed to sense the pressure in the water supply and automatically send a signal to a valve on the discharge side of the pump. This valve will not close all the way, but it will throttle back the discharge, allowing the pump to keep sending water to the fire, while the water supply recovers because the flow demand has been decreased.

Section 5.16 Amend to read as follows:

Where provided, the suction valve, discharge valve, jockey pump valves controller valves, and isolation valves on the backflow prevention device or assembly shall be supervised open by the following methods:

- (a) Central station, proprietary or remote station signaling services through the FACP;
- (b) Locking valves open.



Exception: The test outlet control valves shall be supervised closed.

Section 5.19.1.1 Amend to add the following:

To facilitate flow testing, all fire pumps shall be equipped with both of the following:

1. Test Header. This device is connected to the discharge side of the pump and has a number of hose outlets (equal to the number required at 150 percent capacity ÷ 250 gpm). When testing the pump, the hose is connected to the outlets with water discharged in a safe location. Flow readings are usually taken from the end of the hose with a Pitot gauge.
2. Flowmeter. A special pipe is run from the discharge side of the pump back to the water supply (or to some other acceptable discharge point) with a flowmeter, control valve, and check valve in the line. When testing the pump, the control valve is opened partially (with the pump already running) to achieve the 100 percent flow condition. The valve is opened more to achieve the 150 percent flow condition.

Section 10.2.4 Amend to add the following:

Provide sufficient space in pump room so that there is adequate workspace on all sides of the pump and associated equipment.

Section 10.5.2.1.1 Delete Exception 10.5.2.1.6 (B) (2) (b).

INSPECTIONS: Inspection shall be scheduled by the installing contractor only. When scheduling for inspection, request for sufficient time to complete a thorough inspection of the work performed. Travel time is included in your inspection time.

Test records from pump manufacturer and proper signage are required before final sign off.

DOCUMENT REVISIONS: This document is subject to revisions. For general information and to verify that you have the most current document, please call 408-535-7750, and request the current version date.