



STANDARD FOR INSTALLATION OF STATIONARY FIRE PUMPS FOR FIRE PROTECTION

(NFPA 20-2007)

EFFECTIVE DATE: JULY 1, 2012

NFPA 20-2007 edition, including appendices is hereby added to the list of recognized standards, as contained in Chapter 47 of the California Fire Code, with the following amendments and comments:

Section 5.12.1.1.3 Note:

Location and access to the fire pump room shall be pre-planned with the fire department. In accordance with CFC 509.2; Approved access shall be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment. Hence, fire pump rooms shall be directly accessible from the exterior of the building. A fire rated corridor may be acceptable for access depending on the location and configuration.

Section 5.12.1.1.4 Note:

All interior fire pump rooms shall be free from storage and penetrations not essential to the operation of the pump and related components. Hence, no equipment shall be installed in the pump room that is not specifically for the pump.

Section 5.12.1.2 Amend to add the following:

The fire pump shall be installed in a dedicated building (Pump House) if exterior to the building it is serving.

Section 5.12.1.1.4 Note:

All interior fire pump rooms shall be free from storage and penetrations not essential to the operation of the pump and related components. Hence, no equipment shall be installed in the pump room that is not specifically for the pump.

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 5.14.9.2(3) Note:

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

Section 5.15.9.2(1) Note:

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 5.16.1 Amend to read as follows:
Supervised Open. 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:
(1) Central station, proprietary or remote station signaling services through the FACU.
(2) Local signaling service that will cause the sounding of an audible alarm at a constantly attended point &
(3) Locking valves open only if the building has no FACU.
(4) Delete

Section 5.19.2.1 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 8.4.6 Note:
In accordance with City of San Jose Municipal Code Section 15.08.670E, if a customer receiving service at the city's main or service connection must elevate or increase the pressure of the water received by means of a pump of any kind, the pump shall **not** be attached to any pipe directly connected to the city's distribution facilities. (See NFPA 20, Section 5.30) However, for the purpose of private fire protection service only, customers may request an exception from the requirements of this Section 15.08.670E. by submitting a written application to the director and supporting plans which clearly describe the proposed location of the pump to the director for review and approval.

Section A.9.3.2 Note:
For electric driven fire pumps, provide written verification from the power provider that the normal power source is reliable as defined by 2007NFPA 20 A.9.3.2. Otherwise an alternate power source shall be required.

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.

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 the pump manufacturer and installer along with 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.